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Washington Highlights

Extension of Government claims to states other than California for title to tidelands may be the basis of Federal suits in the near future.

This was indicated by Attorney General Clark, who asserted that the Supreme Court's decision in the Government's suit against California was that submerged coastal lands "belong to the United States."

In a statement before the House-Senate Judiciary Committee, Clark said suit was contemplated specifically against Texas and Louisiana and "possibly two or three other Gulf states." Because of the terms on which Texas came into the Union, that state may have some special defense, he admitted. The Lone Star state contends that its ownership to offshore lands was from Spain and not relinquished when Texas became a state.

Interior Secretary Krug, commenting on the tideland controversy, predicted that President Truman would veto legislation granting the states ownership of their oil-rich tidelands if it is passed by Congress.

Krug called attention to the opinion expressed by the Chief Executive two years ago that if the Federal Government owns the coastal areas, the lands should not be given away.

The Secretary of the Interior told the House-Senate Judiciary Committee that he regarded with favor the passage of Administration bills to give the Federal Government control of lands offshore and to surrender any Federal claims to inland submerged ground.

Senator McCarran of Nevada charged that the Federal Government claimed the tidelands within the boundaries of states only as a means of getting oil.

"If oil had not existed off the California coast, the Federal Government never would have brought suit against that state to claim ownership to the offshore lands," the Senator stated.

Clark denied McCarran's implication that oil prompted the Attorney General's role in the California suit and said that his purpose is to see that the High Court's decision in the California case is carried out.

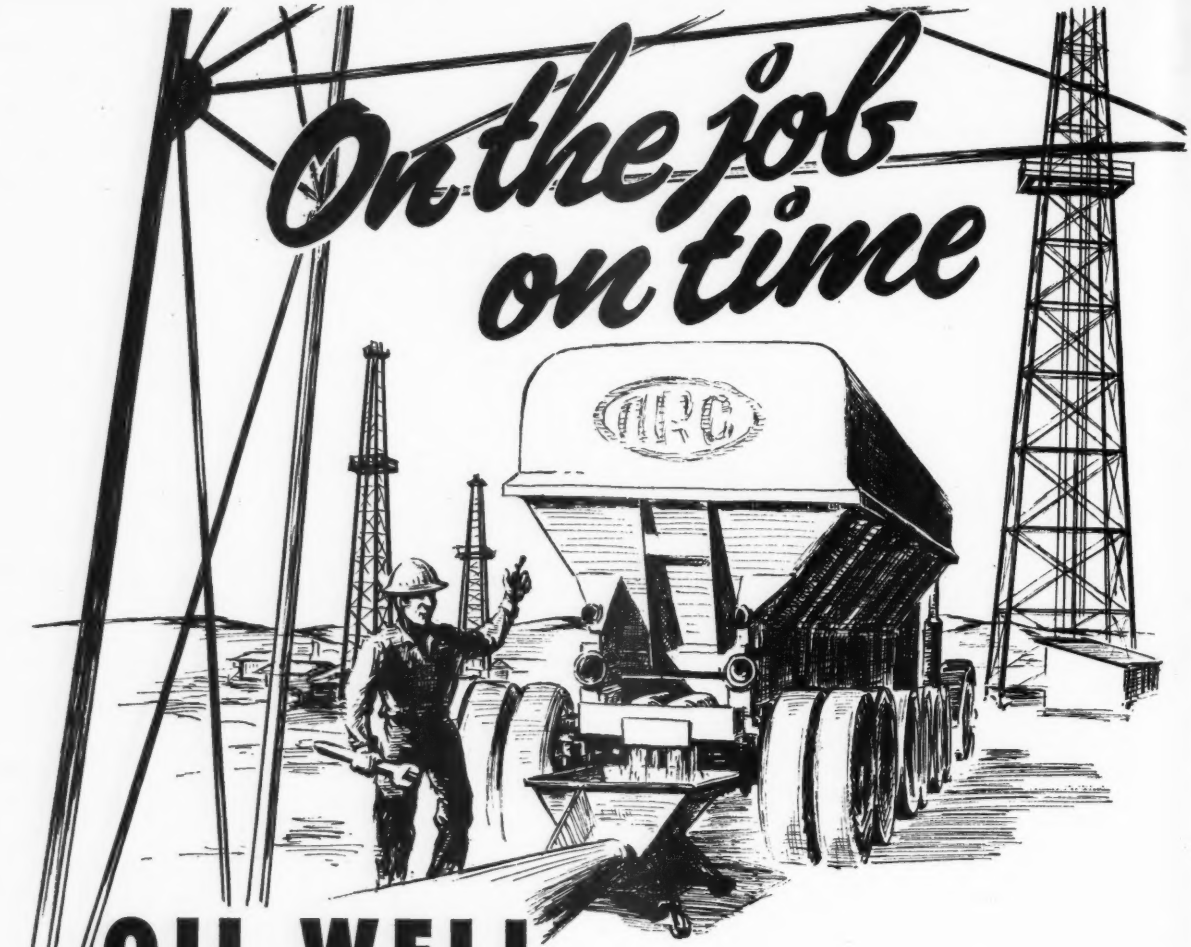
Both the Senate and the House have voted for another three year continuance of the Government's experimental program for making oil and gasoline from coal and shale. The measure provides the Interior Department with an additional $30,000,000 for the program beyond a similar amount already authorized under original 1944 legislation. The department at present is operating a demonstration plant which extracts oil from shale. Another small plant producing liquid fuels from coal is expected to be in operation next summer.

Walter S. Hallanan, chairman of the National Petroleum Council, has called the second quarterly meeting of the council for Thursday, April 15, in the Secretary's conference room, South Interior Building here.

The House Interstate Commerce Committee has approved legislation to impose a 30-day export embargo on petroleum and petroleum products from East and Gulf Coast ports. Crude oil shipments from United States abroad have been at the rate of 7,200,000 barrels a year, exclusive of Canada, which has been the recipient of 2,600,000 barrels a month. The Commerce Department recently banned export of crude oils without a license to any foreign country except Canada.

Mineral fuels produced during 1947 in the United States had value of $7,800,000,000, compared with $5,725,000,000 in 1946. This was an increase of 36 per cent, an all-time peak, according to the Bureau of Mines. Crude oil production in 1947 amounted to 1,855,000,000 barrels, 7 per cent greater than in 1946. The crude was valued at $3,599,000,000, an average of $1.94 a barrel. Marketed natural gas increased almost 10 per cent in 1947 over 1946 to a new record of 4,400,000,000,000 cubic ft., valued at $1,015,000,000 at consumption points. Natural gasoline production gained 14 per cent over 1946. It totaled 5,534,000,000 gallons valued at $322,000,000 at the plants.

Secretary of Commerce W. Averill Harriman has appointed Don Belding, widely known Los Angeles advertising executive, as chairman of the department's small business advisory committee.



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Overcoming Lost Circulation

Concluded from Second February, 1948 Issue

Overcoming High-Pressure Losses

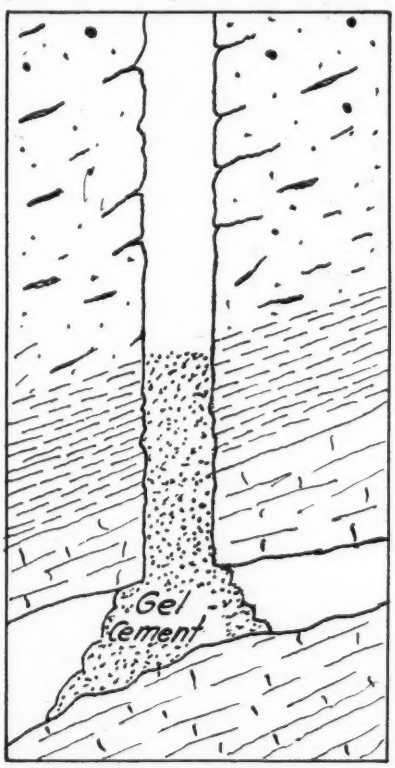
These losses occur where high pressures are exerted against the formation. They may be said to be pressures equivalent to those exerted by muds weighing more than 105 lb. per cu. ft., or greater than a gradient of 0.728 p.s.i. per foot of depth. This discussion deals primarily with mud pressures but, in order to clarify the effect of pressure on the formation, some mention should be made of other methods of obtaining equivalent high pressures. All these pressures are measured in pounds per square inch (p.s.i.) and the effect on the formation is the same for any given pressure regardless of the origin.

Probably the most familiar example of high-pressure loss is that which takes place during squeeze cementing to shut off gas or water. Here the hydrostatic head of the fluid column in the tubing or drill pipe is increased by as much as 5000 p.s.i. pump pressure. The total pressure on the formation is then the hydrostatic head of the fluid or mud column plus the pump pressure. This pressure is confined to the section being squeezed by a system of packers which effectively seal the annular space between casing and tubing, thereby preventing equalization of pressure by preventing returns. Under these pressures both the liquid and solid content of the cement slurry are pumped into the formation. Volumes of cement disposed of by this method are frequently far in excess of the amount of cement that could be accounted for by assuming a filter cake of cement solids resulting from filtration of the mixing water to the formation. There have been instances of sidetracked holes being cored after the original hole was squeeze cemented. The cores showed alternate sections of formation and cement, demonstrating that the cement was pumped bodily into a crevice which was formed, probably along a cleavage plane, by splitting the formation apart.

Another method of obtaining pressures in excess of the hydrostatic head of the mud column is sometimes used where, for special purposes, circulating systems have been designed to maintain a back pressure on the casing. This is accomplished by drilling through a specially designed blowout preventer or packer and adjusting volume of returns through chokes. When this is done, the effective pressure on the formation is equivalent to the hydrostatic head of the fluid column plus the back pressure maintained on the casing. This total pressure will have the same effect on the formation as if it were all mud pressure.

Constant Vs. Increasing Mud Weight

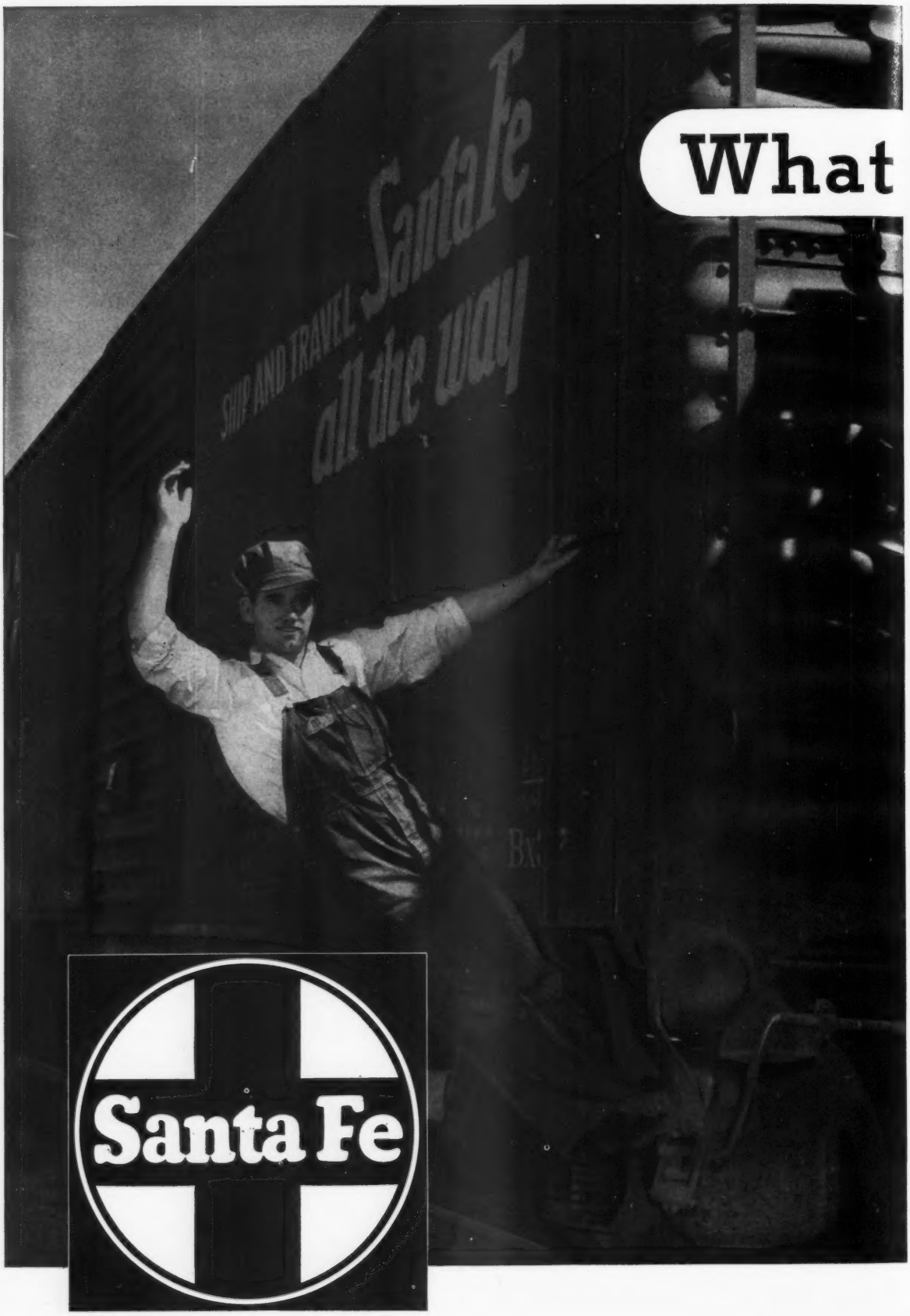
If the weight of the mud has been raised as drilling progresses, it is often difficult to determine at what depth returns are being lost. It is possible for a poor cement job on the casing to give way and allow the heavy mud to travel up the outside of the casing to a porous zone. Plugging and bridging agents added to the mud will correct this condition, although comparatively large volumes of mud may be required to carry these agents to the point of loss. If the weight of the mud has remained constant since the last casing was set, then it is reasonable to assume that the loss is occurring near or at the bottom of the hole and corrective measures may be calculated on this assumption. A third condition for lost returns, not likely to be confused with the other two, obtains when the hole bridges around the drill pipe, sealing the annular space so that flow of mud is stopped. Bridging may be caused by cavings, balled-up bit, thick filter cake or accumulated cuttings. When this happens pump pressures increase, and rotation and raising or lowering of the drill pipe becomes difficult or impossible. If the pipe can be worked to a point above the bridge, circulation will be regained. Hole can then be cleaned out. At the first indication of bridging the mud and drilling procedure should be examined carefully and corrective measures taken to prevent recurrence of the trouble.



In the above illustration, the bit has entered a large cavity and circulation has been lost. Gel cement mixed to give a high angle of repose has been dumped into the cavity and has built up a cone of cement through which the hole can be continued.

Bridging Agents

Usually loss of high-weight mud occurs at a depth of several thousand feet which indicates that the high hydrostatic head on the formation is responsible. At ten thousand feet, a pressure of 8320 p.s.i. is exerted by mud weighing 120 lb. per cu. ft. Such pressures make the use of bridging agents more desirable than the plastic plugging agents. Fibers and mica should be added to the mud. This mud is pumped into the hole until returns are restored or until resort is had to some other method. Cases are recorded in which returns have been obtained after several hundred barrels of the fiber-mica mud have been lost to the formation. The explanation of what happens here is not clear as the bore holes have remained open even though the amount of fiber and mica entrained in the lost mud was sufficient to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form a solid plug if they had been deposited on the face of the formation. It is probable that many of the crevices opened by high pressure are not over a few hundredths of an inch wide. The fibers and mica fill these narrow openings, this resulting in an increase of resistance to the flow of the mud. When this resistance becomes greater than the hydrostatic head of the mud, returns are again established. Additional increase in mud weight may result in opening of a new crevice or further flow through the old crevice.

Reduction of Mud Pressure

Reduction of mud pressure may be accomplished by lowering the unit weight of the mud and also by reducing the pump pressure as previously discussed. Sometimes a balance of mud pressure with formation pressure may be accomplished. This range of pressure is generally quite narrow. A difference of 0.2 to 0.4 lb. per gal. in density of the mud may mean the difference between lost returns and flow back of formation fluids. If this flowback is not controlled at all times, a blowout may easily result. Such a procedure is not recommended unless other methods of control have failed and the expected results justify the hazards involved.

Cementing

If the hole is in a suitable condition, cementing is sometimes attempted. In order to be successful the cement job should resemble a squeeze job in that a portion of the cement should be forced into the formation. A mix of three to five per cent gel-cement offers the advantages previously discussed.

The following use of cement is not a cure for lost returns but deserves mention as it is applicable in some instances of high pressure losses. Frequently the drill pipe becomes stuck before returns are regained. The use of high weight muds presupposes high formation pressures. If the mud is being lost at or near the bottom of the hole, a fishing job for the stuck drill pipe becomes extremely hazardous unless the loss can be corrected. This may be accomplished by placement of a batch of cement through the drill pipe. Pressure should be held on the cement until it is set. If no loss or flowback occurs after the

The high angle of repose obtained by mixing prepared bentonite with the slurry to make gel-cement is here indicated. The upper view is of gel-cement made of construction cement containing 6 lb. of bentonite per sack of cement mixed with 8½ gallons of water per sack. The lower view is of neat cement made with 6½ gallons of water per sack of cement.

cement has set the drill pipe may be fished out under normal procedure. It may be desirable to leave the bit and drill collars in the hole, sidetracking them if the hole is deepened. The mud used in the sidetracked hole should be treated with materials which will tend to prevent the loss of mud to the troublesome section when it is again penetrated.

Preventive Measures

If the loss of volume of high-weight muds can be reduced by preventive measures, the measures taken to accomplish this are an economy. As the mud weight increases, the unit cost of making these muds increases. Loss of native 75 lb. per cu. ft. mud represents only a few cents per barrel whereas loss of 120 lb. per cu. ft. mud will run into several dollars per barrel. Rig-time costs must be added to mud cost to get a true picture of total expense. If in addition to mud and rig costs the well flows out of control, the operator has increased his expenses by the value of equipment lost, damage to the producing reservoir, and time and material required to bring the blowout under control.

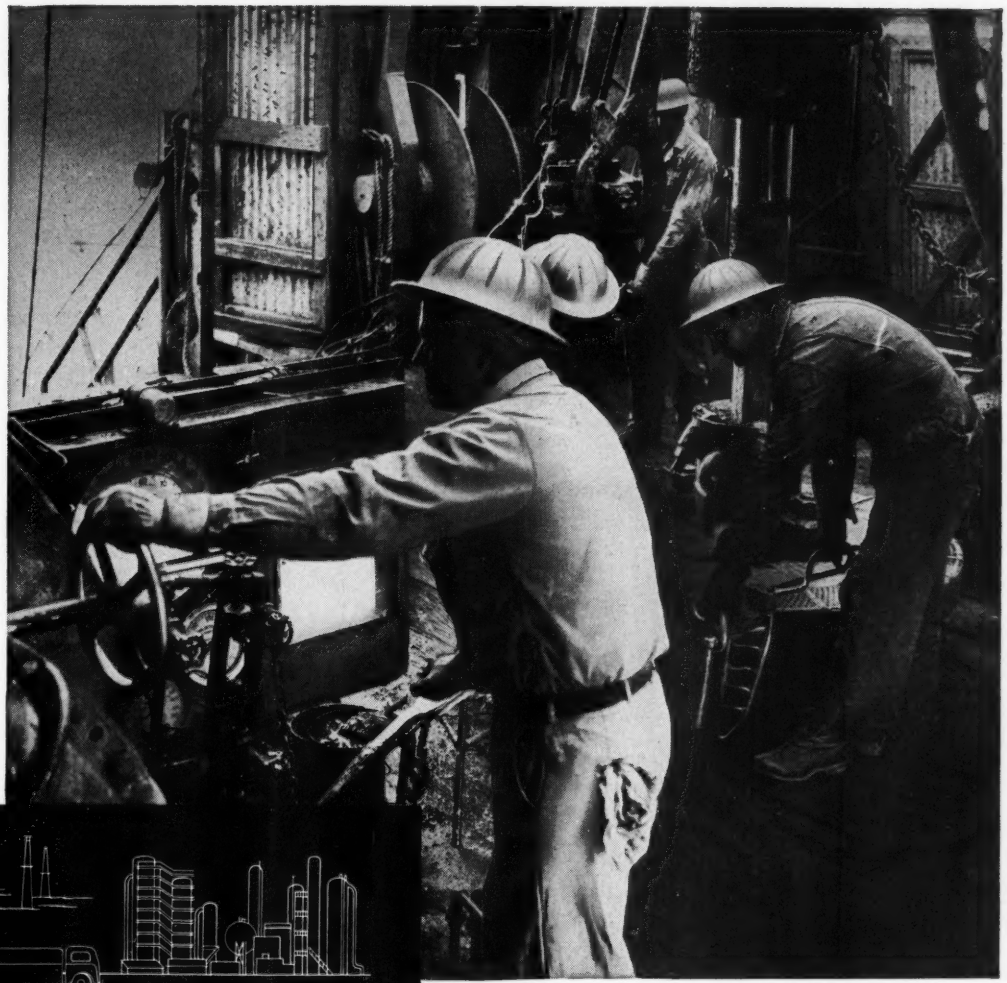
Where formations to be drilled are known or suspected to carry fluids under high pressures, requiring the use of high weight muds, the casing program should be designed to fit these conditions. Under conditions of normal pressure, long sections of open hole are successfully carried with modern mud control. Where abnormal pressures are encountered, the longest string of protective casing possible is the best. The protective casing must be set before the mud weight is increased to a point where breakdown of the formation takes place. If 2000 feet of surface casing were set and the section below "breaks down", or takes mud weighing 109 lb. per cu. ft. then casing should be set before control of formation pressure demands a mud of this weight. Assuming the hole can be drilled to 9000 feet with mud weights of less than 109 lb. per cu. ft. but will require that heavy a mud at 9500 feet, then casing should be set somewhere between 9000 feet and 9500 feet.

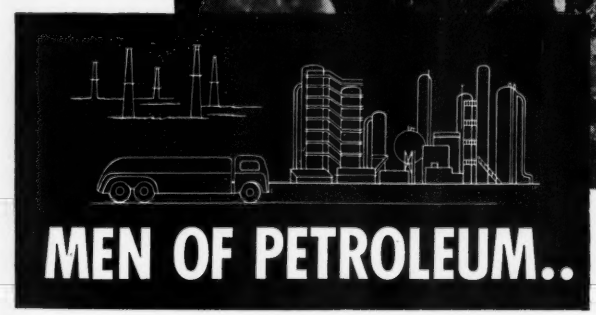
The presence of such a string of casing will allow drill pipe to be pulled into the casing in case of trouble while corrective measures are taken. Or if the drill pipe becomes stuck, there is less pipe in the open hole to fish out. A long string of casing also prevents keyseating and stuck drill pipe in the section of the hole so protected.

Use of bridging agents in the mud requires by-passing of the shale separating screen. This is not desirable in normal drilling but if a zone is expected to take mud, these agents should be added to the system before penetrating the zone. If they are added ahead of time, they will be available for correcting the loss immediately. If they are added after loss takes place, they must, of course, be carried to the formation taking mud, which means that all the untreated mud between the pits and the section taking the mud will be lost to the formation.

Overcoming Cavernous Losses

Here actual caverns or crevices exist in the formation and they are of a considerable areal extent or are interconnected with other caverns or crevices. They may be full of water or gas or may be dry. Sometimes the drilling tools will drop several inches or feet. The drilling mud disappears immediately the cavern is penetrated. Materials





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such as cotton batting, sacks, rope, wire, straw, etc. have been pumped and crammed into caverns with no apparent effect. Ordinary mud may be pumped into the hole indefinitely. If the fluids in the caverns are under pressure, liquid flow or a gas blow-out will occur immediately after losing returns. Fluids present in exposed formations above the caverns may blow out also. If unconsolidated formations such as sand or gravel are present in the open hole, they may cave and stick the drill pipe. If the cavernous formation is full of fluid, the level of the drilling mud will fall in the hole until it is in hydrostatic equilibrium with the pressure of the fluids in the caverns. The depth to which the mud falls will be from a few feet to several hundred feet. In this type of lost returns, little can be done if severe caving is present in the exposed formations between the casing seat and the point at which returns are lost. The logical procedure would be to move to a new location and set casing below the caving section, but before drilling into the cavernous section.

Use of Low Weight Muds

If the mud stands reasonably close to the surface, and has any considerable unit weight above that of water, sufficient returns may sometimes be obtained by lowering the mud weight several points. If this is done, cuttings may not be of much value for correlation, as most of them will probably wash out into the cavernous section. If this method is usable it permits penetration of the section, after which casing may be set and normal drilling resumed. The presence of fluids in the exposed formation above the caverns may make this method too dangerous to use unless the fluid is water, in which event the water flow obtained might be used as drilling fluid if such flow and use did not result in caving.

Blind Drilling

"Drilling blind" is a term commonly used to describe the condition wherein returns are completely lost but drilling is continued by pumping water through the drill pipe and washing the cuttings out into the cavernous section. This method requires a very large volume of water. Pump volumes should be high in order to obtain a velocity in the annular space sufficient to carry the cuttings far enough into the cavernous section so that they will not fall back into the hole. Pumps should be run some minutes after drilling a joint down to clean the cuttings out of the hole; otherwise, the cuttings may settle back around the pipe, resulting in stuck tools. Back flow through the drill pipe, when connection is being made, is common and may result in a plugged bit. This may be overcome by putting a drill pipe float valve in the string of pipe above the bit. Frequently large cuttings which cannot be washed out with water will accumulate in the hole. When this happens a few barrels of thick gelatinous mud may be pumped into the hole. This thick mud will pick up and carry the cuttings out into the caverns. In order to use this method of drilling, the hole must have no caving sections or formations carrying oil or gas under pressure. Water pressure resulting in an artesian flow may furnish the water required for drilling if the flow is not severe enough to interfere with rig operations. If desirable, the artesian water flow may be controlled by addition of mud to the annular space between the surface casing and the drill pipe. Where this method of control is used, the mud is added until the fluid level in the annular space falls some feet below the surface. Further additions are made when the fluid level again rises close to the surface.

Drilling carried out under the above conditions does not allow any control of oil or gas movement. Oil or gas, if confined to the hole, is still free to migrate to the cavernous section and is extremely difficult to detect. Geological information is confined to cores and electrical surveys as, of course, neither cuttings or mud is available for inspection. For these reasons, as well as the danger of caving and stuck drill pipe, casing should be set as soon as the cavernous section is penetrated.

Crevices may be treated as caverns except in those cases in which the wall of the crevice approaches the vertical and results in deflection of the drilling tools from vertical. When this occurs and drilling is continued, the crevice must be cemented as described below under use of cement.

Use of Aquagel Cement

The term cavernous, as applied in the discussion of the use of cement for lost circulation, in-

Union Pacific's Offset #13 at Wilmington (Terminal Drilling contractor) Left to right: Thomas E. Newbill, Cathead; Robt. T. Hunt, Lee Tongs; John Simkins, Pipe Racker; C. H. Sharp, Driller; and W. R. Stevans, Derrick Man.

ludes both caverns and crevices. In most instances it becomes desirable or imperative that a cavernous condition be corrected before drilling is continued. Plugging and bridging agents are usually tried, but if a truly cavernous condition exists, these materials rarely help. When these conditions exist the use of gel-cement is indicated.

The purpose of the cement is to fill or bridge the caverns sufficiently to allow hole to be drilled through the cement plug. If neat cement were used the volume of cement needed would be enormous compared to the volume of gel-cement. This is due to the fact that a neat cement slurry containing as little as 4½ gallons of water per sack of cement has a very low angle of repose. In other words, the cement slurry flows to the lowest point in the cavern or crevice where it assumes a flat, pancake-like shape. Any increase in the water-cement ratio results in a thinner slurry, which naturally flows a greater distance and for each batch results in a lesser thickness of fill-up. Gel-cement, when used for bridging caverns, should be mixed 8 to 10 pounds of prepared bentonite and 10 to 12 gallons of water per sack of cement. This will give a gelled cement having an angle of repose greater than 45°, which means that the cement will stack up in a cone-shaped mass when dumped through the drill pipe into a cavern. If necessary, the mixing and placing of the cement is continued in batches, with a time interval between batches long enough to allow the previous batch to set. The total cement required is that volume which will build a cone from the floor to the roof of the cavern where the bit first penetrated the cavern.

The volume of set gel-cement is approximately the same as that of the slurry and this characteristic of setting causes the gel-cement to fill any voids completely. In contrast, neat cement slurries lose considerable water on settling and this causes the cement to shrink, leaving unfilled gaps at the tops of crevices through which circulation may continue to be lost. The consistency of the gel-cement slurry is such that it resists dilution with any water which may be in the cavern. After filling the cavern, and returns are obtained, the cement is drilled and hole making resumed. The above procedure will frequently make it possible to save a string of casing as well as shorten the time required to drill the well.

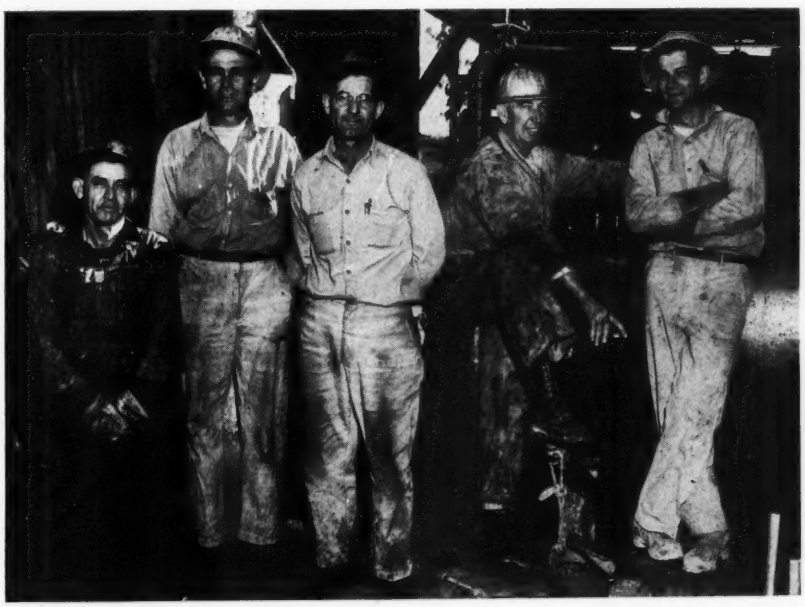
Conclusion

This discussion has pointed out the various types of lost returns with some characteristics of each which should enable the operator to classify the type. With each type of lost returns a number of materials and methods of using these materials have been given. Proper application of materials and methods will minimize the time and material required to overcome the trouble caused by lost returns.

In addition to all of the above it is well to remember that continued pumping of the same kind of mud that was originally lost rarely accomplishes satisfactory correction but results only in the expenditure of time and materials.

While there is no cut-and dried method of using a definite amount of a certain material to prevent or regain lost circulation the procedure is far from being a trial-and-error operation. With the sub-surface data now generally available for a field or area under development, the type of strata that can be expected is usually known. The behavior of these strata cannot be forecast from well to well but the knowledge of structural conditions can certainly serve as a guide to regain circulation readily even if the loss of circulation is not prevented.

Even in wildcat drilling there are frequently sub-surface data to guide in treating for lost circulation. But here the unexpected is more likely to occur. If the rate of loss is low, cognizance must first be taken of the weight and character of the mud fluid and assurance made that the problem is not just one of high water loss. If the loss of fluid is voluminous and sudden it would be reasonable to believe that the bit had penetrated a highly fractured zone and that considerable waste of time and money could be saved by using gel-cement. Most of the loss of circulation, both partial and complete, will occur between these two extremes and can almost always be overcome by the use of mica or fiberous material, or a combination of these two admixtures, properly applied to meet the conditions.



British American Oil Prod. Co.'s Park-Bodger #1 at Alondra Park (Severns Drilling contractor) Left to right: O. P. Ainder, Lee Tongs; J. R. Senske, Driller; Len Grace, Mechanic; P. Hughes, Cathead; and T. R. Ice, Derrick Man.

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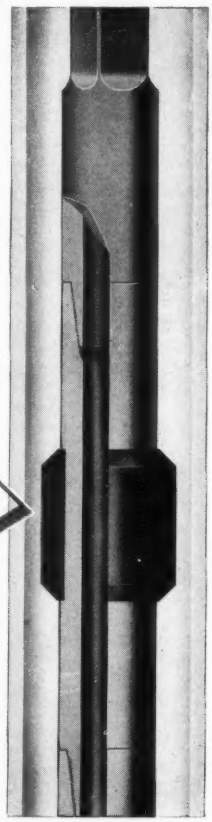

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With a 4¼" square kelly hanging in 9⅝" casing, as shown in the illustration on the right, the distance between the side of the casing and the corner of the "grief stem" is 1²¹⁄₃₂". This is a small amount of clearance when you consider the number of causes that may make the kelly wobble. The cross section shown has a 4¼" Kelly Sub, 6" O.D., grooved to 5½", with a Patterson-Ballagh Stabilizer, Code: FLAX, installed. The 7⁷⁄₁₆" diameter of this Stabilizer gives ample protection against wear and does not interfere with mud circulation. Install a Patterson-Ballagh Kelly Sub Stabilizer on your saver sub *today* and save your surface casing.

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Kern County OIL NEWS

KERN COUNTY was glad to hear that steel for oil should have a higher allocation since there is no use building more cars if there is no fuel to burn in their engines. And also that the West is not likely to experience a fuel shortage.

BARNEY BARNARD of the Conservation Committee, however, is biting his lip for the reason it's going to be tough on the MER's if demand increases with steel short.

EXECUTIVE MANAGER C. E. BUCKNER gave an IPPA report on its membership activity and recited reasons for continuing the program staked out by President Becker and IPPA's representative at Washington, "DC" Russell Brown who is doing a monumental work including the features at the Tidelands oil . . . which involves "states rights" as the principal factor.

THEIR PURPOSE WAS EXEMPLARY . . . as IPPA members and allied associates drifted into the Spanish Ball Room where everything in the house was on ANGUS CRITES their northern vice president. At this annual gathering the oilwigs of the country were unassuming. But the oil industry knows what a powerful tower of strength these men who were present represented.

IN KERN COUNTY there are 11,500 active producing wells and 75 are being drilled at the present time. While we are still producing more oil than we are finding in Kern as well as elsewhere the old Elk Hills reserve for the Navy is giving aid and comfort to some oilwigs here. Elk Hills is said to contain 300 million barrels of recoverable oil. The 1947 production figures now in as incomplete show that Kern is about 6,300,000 barrels short of the record production in 1945.

DIOGENES OF KERN must be an oil man because here is what he found while looking for an honest man:

	1937	1948	Increase
Eggs	.25	.58	132%
Butter	.38	.92	142
Hamburger .	.10	.45	350
Lettuce	.05	.12	140
Bacon	.27	.69	150
Ethyl Gas ...	.22	.25	18
Regular Gas .	.19	.23	26

Figures are from **Newspaper** files March 1, 1937 and January 29, 1948 store ads.

HOW BIG IS OIL IN KERN COUNTY? . . . "Bigger than ever," said PAUL HOWARD an independent and well known consulting engineer in oil production valuation and tax analysis. Despite Kern's lead in national supremacy at the expense of declining reserves, Kern's county chamber oil chairman continued with these statements: "This years income may go to $160 millions and right now it is pushing 150. Greatest in Kern's history in value, but not in production," said Paul. These of course are preliminary figures.

HERE IS SOMETHING MORE TANGIBLE PERHAPS: (crude oil values only)

Production		Estimated Value
110,290,276 bbls.	1945	$116,846,281
100,640,406 bbls.	1946	120,353,402
104,000,000 bbls.	1947	150,000,000

ALBERT FRITSCHE, mineral appraisal engineer for the Kern County Assessor J. H. HANKS, reported that average gravity oil in Kern was 22 degrees with average price 1947 $1.76 compared with 1946 $1.20.

REWARDED for faithful services in her part to make Kern County a better place in which to live, Mrs. Frances Engle Stockton matriarch of one of Kern County's leading families, was taken suddenly in death late the past month. Surviving son, FRANK R. STOCKTON, a statewide figure in agriculture, is an oil geologist and petroleum engineer. WARREN STOCKTON another son is judge of the superior court. Jess D. Stockton whom we mentioned last month is superintendent of Public Instruction here. One of her nephews is Congressman CLAIRE ENGLE whose district is blessed with the mineral resources of California. A host of relatives mourn her passing; and the whole county is saddened at this hour.

BEFORE PRINTERS INK is dry on our copy for the 1947 oil income which is estimated at over a $150 millions with a possible nod for $160 millions out comes the agricultural report showing firmly the new cash income figures out in

INDEPENDENT PETROLEUM PRODUCERS ASSOCIATION meets with its Northern California Vice President Mr. Angus Crites in Bakersfield. Left to right are: Arthur S. Crites, retired banker brother to Angus; Merle Becker, president of IPPA, St. Louis; Angus himself; C. E. Buckner, executive general manager of the Association from Tulsa; Rush Blodget, California Oil Producers Agency Executive and Charles Premo, Secretary San Joaquin Valley Oil Producers.

front of Oil. This may be the third time that Oil is beaten on income.

"THE NEW LOOK IN BUSINESS RACKETS" was the title of the address given San Joaquin Valley Chapter, API and Conservation Committee by the general manager of Los Angeles BETTER BUSINESS BUREAU, Mr. Robert J. Bauer, at the annual event in Bakersfield Inn. Said he, "oilmen are not exempt or fool proof from the ravages of the old disease with a new look."

OILMEN call Bauer outstanding in the business as his forthrightness and good judgment have saved hundreds of persons in the oil industry thousands of dollars. Business and the public alike have profited.

W. L. HOBRO, Los Angeles chairman of the Conservation Committee introduced Bauer after explaining and reviewing the work of the Conservation Committee. "THE OIL INDUSTRY MUST SAFEGUARD AMERICA'S MOST PRECIOUS RESOURCE. IN CALIFORNIA WE ARE DOING THIS ON A VOLUNTARY BASIS, AND THE COMMITTEE HAS 57 MEMBERS, 22 OF WHOM ARE IN THE SAN JOAQUIN VALLEY. ONLY MEANS OF THIS PROTECTION IS BY THE COMMITTEE," said HOBRO.

TO THE HOSPITAL last fortnight or so ago went FLOYD F. DICKENSON from the Standard 7 D lease at Maricopa with a fractured wrist. Joining him a little later was EARL J. CRAWFORD of Signal Oil & Gas with an ankle painfully crushed and broken.

LEE CLARK well known Fellows oil youngster has returned from the Western States Fairs Association convention in Sacramento. Leaving the oil business sometime ago Lee joined the training staff of USC's fourth estate business. As a publicist he became familiar with public relations and is now managing the affairs of the FIFTEENTH DISTRICT AGRICULTURAL DISTRICT which is rumored to have included an exhibit for PETROLEUM in 1948. Last year MINING was a favorite show for the oilwigs who often win the most prizes for good stock, especially racing breeds.

HERBERT C. GOLDMAN popular Kernoilman quit the rent control board last month . . . (FEB) because of the intensified work of the board. Second only to Los Angeles the work load of the board is tremendous. His letter of resignation went to TIGHE E. WOODS, housing expediter, office of rent control, Washington, D.C. His successor will be chosen jointly by the city and county governmental bodies, as their recommendations before the governor are usually sufficient, when presented to Woods for final okey. Herb did a "bang-up" job as he always does in everything he undertakes.

OILDALE is to have new sewer lines and this comes as a good word to many oil executives and employees who live in areas north of the River known as Oildale, Highland Park, Orloff Manor and other environs of North Bakersfield.

OF COURSE WE FOUND out something this time. Pipeline re-

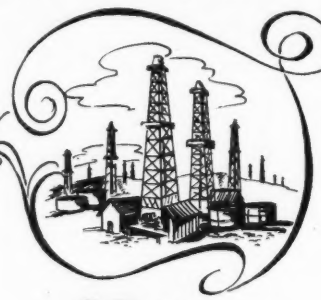
ALATA CONSTRUCTION CO

GENERAL CONTRACTORS

INDUSTRIAL BUILDINGS

Morgan Bldg.
Bakersfield

544 Market St.
San Francisco



25 Years

Celebrating a Quarter of a Century of Service to Oil Men and the Oil Industry

SILVER ANNIVERSARY YEAR

KERN COUNTY BANK

TAFT • OILDALE

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

YOUNG OILWIGS ARE APPEARING and "Oiltime Marches On." . . . Look at young Joe Spellacy . . . back from war and walking in Joe's shoes . . . With him Bob Dear taking lessons from Joe. SJVOPA's Charley Premo is approving while YOUNG-WIG Claude Morrison's Junior refuels. Another younger-comer . . . Bill Van Fosson with Ruby Hutchins guiding the line. All of them young independents who shouted, "GIVE US STEEL. LEAVE US ALONE, AND WE WILL PRODUCE ALL THE OIL THAT YOU NEED."

"PUG" YORK OF MILLER & YORK does a little slant operation . . . this time it's for olives at the IPPA buffeting by Angus Crites.

IPPA GUESTS OF ANGUS CRITES take on food supplies at El Tejon's buffet facilities: Bringing up the rear is IPPA's Art Oliger, West Coast Manager; Arthur S. Crites, Kern's first citizen; Lloyd A. Miller of Miller & York; Laurel Saunders, Independent Exploration Company; and Dave Rowland, famous oilwig caterer and "Matre D" of the El Tejon.

Executive Manager C. E. Buckner of Tulsa; Vice President Angus Crites of Maricopa; Don Lucas of Bakersfield, Ruby Hutchins of Taft; and Rush Blodget of Los Angeles fortify the IPPA meeting in KERN COUNTY recently with chow. Angus is always HOST to the group . . . usually with San Joaquin Valley Producers Association.

strictions in better behavior areas control overproduction, since the lines will not accept any overages. Disagreement with the Conservation Committee helps to make oil flow here because there are so many more pipelines . . . and the operator knows where to find them if he chooses to not follow the recommendations of the committee. Some one offsets him and he opens up his well pronto. Guess everyone knows this.

ASSEMBLYMAN J. E. "JIMMY" JAMES, geologist . . . lawyer and lawmaker is announcing that he will attempt to return to the assembly again from Kern County. When you read this he will have filed his notice of intention to be a candidate and run on the record for assemblyman of the 39th district. JAMES WAS ON WATER, TIDELANDS Committees. His work was most effective and success was attained in getting some road into the state system last year for the first time in 14 years.

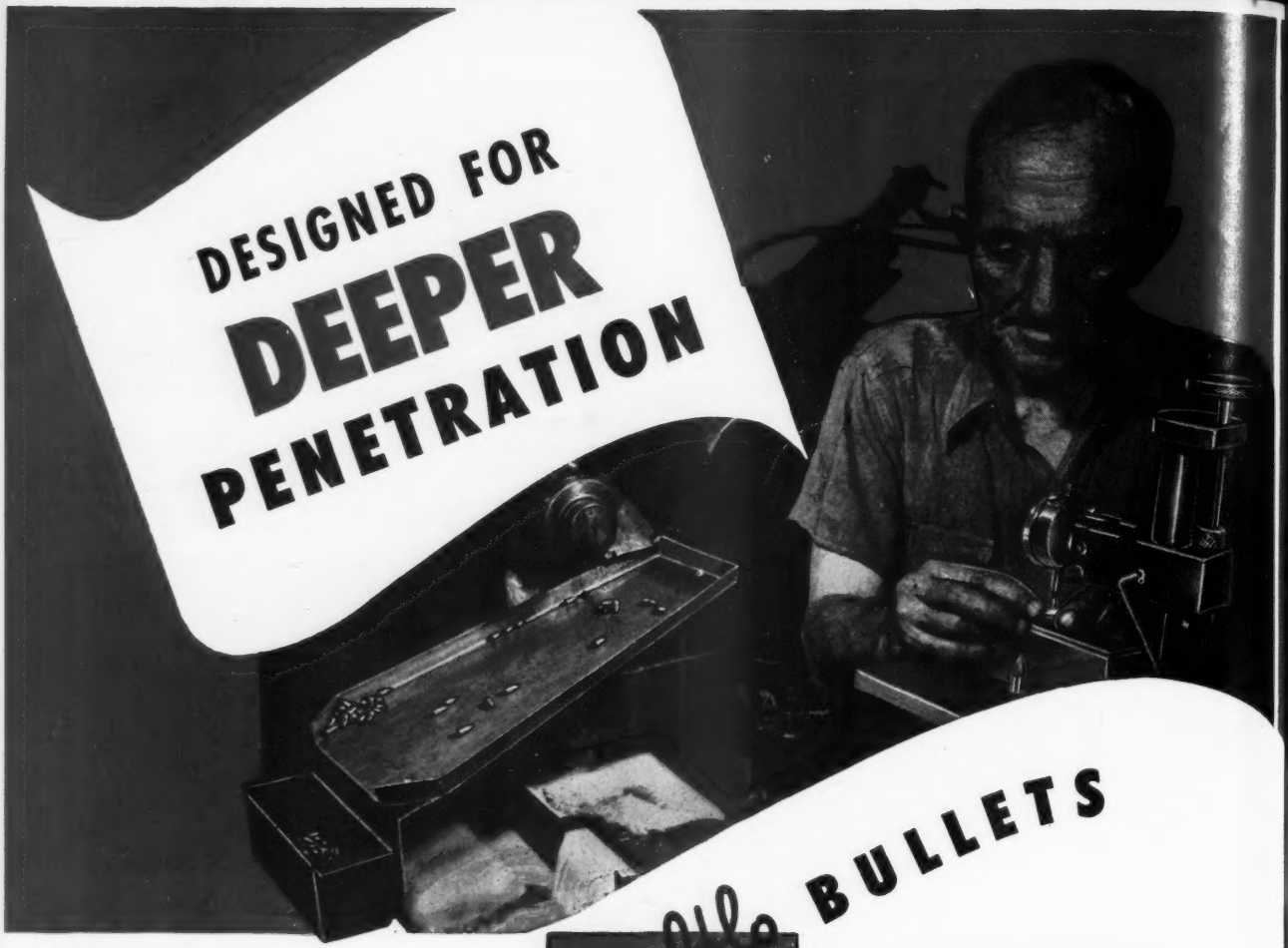
GOOD NEWS OF THE MONTH is Richfield's new location headquarters 2½ miles South of BRUNDAGE Lane or Stockdale Boulevard on "H" Street. Fine new spacious headquarters centrally located with a parking plan. MASON HILL reported that he drives more miles than that (2½) to park.

AND SO that reminds us of the rumor we heard that Seaboard, Western "GEE O" will move out of Elk Hills and probably take up space left in the Haberfelde building by Richfield.

OF COURSE Gene Powell says he is just going up to Calgary, Lake Louise and Banff as a helper to Barnsdall . . . but the truth is he is the "Gene McCoy" of the woods. He is not going for his health either and we might add the climate. HE IS GOING TO RUN THE SHOW up in Calgary's ice and snow. (No rhyme intended).

HARRY GOODE chief geologist for SIGNAL OIL AND GAS introduced the assistant or resident geologist M. B. PAYNE who lives out on South Chester where headquarters for the wildcat program will commence in full swing. All this pending an office location and a telephone which are both scarce as oil at the present time. We are trying to get in a good hand for Goode and relieve the growing pains for Payne. Kern County is growing so that out where Mr. Payne lives the telephone poles are not even unloaded on order.

CONSERVATION COMMITTEE of the California Oil Producers is an imposing one in Kern County from the standpoint of fine personnel. The long list of California names include: STARK, BELL, DOOLEY, TURMAN, WILLIAMSON, BOLTON, AB-



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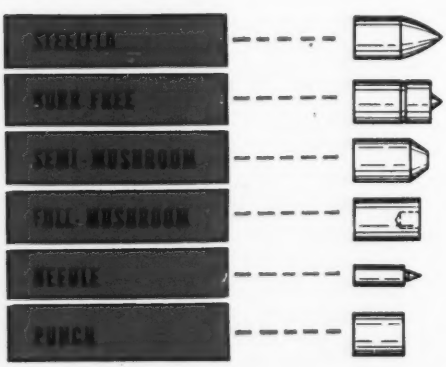
LANE-WELLS Steelflo BULLETS PROVIDE STRENGTH FOR CLEANER PERFORATIONS

THERE IS A LANE-WELLS BULLET FOR EVERY GUN PERFORATING REQUIREMENT



No matter what the requirement, there is a correctly designed, accurately dimensioned Lane-Wells Bullet to do the job right!

Tomorrow's Tools—Today!

Lane-Wells originated the ogival-point bullet and standardized on the Steelflo Bullet design only after it had been proved to be superior in both perforating and penetrating powers.

To maintain high standards of performance in the field under the many and varying well conditions encountered, Lane-Wells guards closely every step in the manufacturing operations of Steelflo Bullets. Steel to Lane-Wells specifications is accurately shaped, heat treated and ground to exact sizes. Each batch of bullets must test to prescribed Rockwell hardness for the desired toughness and strength.

More than a million Lane-Wells Bullets were fired during the past year with better than 97% perforating efficiency. This sustained record of field performance is your assurance that when you "call Lane-Wells" you get the job done right!

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24-HOUR SERVICE — General Offices, Export Offices and Plant — 45 BRANCHES

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RUNS, PREWETT, WELLS, STEPHENS who are district chairmen and alternates sometimes known as the MERmen of the sea of oil that lies below these county areas.

OILMAN'S CHAMBER OF COMMERCE Taft lost its valuable Manager Vern McLeod this month who resigned to enter private business on the Westside. Vern made the "OILDORADO" famous as a symbol of pioneer petroleum spirit of 1910 when Taft was Incorporated, which has been celebrated each year recently in commemorating the occasion.

LOST HILLS has not lost any of its activity in oil with four or five majors punching holes in the oil pools. Standard, GeePee, JDR, Richfield, Superior and TWA are all doing considerable work.

DWIGHT BOVEY of Western Oilfields Supply (WoSco) has a namesake in pronounciation but not in spelling. Robert W. Bovee is the one . . . and new research director for the county.

NOT SINCE LAWNDALE has any field proved so strange and mysterious in its production behavior, as has the CUYAMA Valley. Last month our hopes were inflated, but this month we are spudding in new hopes if any that the field will be something more than once reported, "A ONE WELL BABY."

WELL, WE TALKED to several other people who agreed but keep on drilling . . . they have heard of some steel and started up just the same.

STEEL is something again allright and we saw two rigs being racked on our way to work this week. . . . No Steel. Permits are still making records just the same. Although someone said 200 more wells could have been drilled in Kern River alone. We don't know for sure.

GLENN LAYMAN paymaster of Oil Field Construction Company is at hard work building heating plants for treating fluid at the pump in the process of squeezing out the water. Long time ago firing by hand took place but this was re-

OUR RENTAL PIPELINES SAVE YOU $ $

SAVE TIME-EFFORT-MONEY!

Inexpensive - Rapid Installation

Your pipeline problems are solved in a hurry, when you call on WoSco! Just say where and when you want your rental pipeline for water, gas or oil. WoSco experts will install it, test it, pick it up when you say the word. Inaccessible locations and rough terrain are a WoSco specialty.

Rental pumps for water lines now available. Three and four inch Victaulic-coupled lines available for immediate installation. For further information on rental lines and pumps, phone or write . . .

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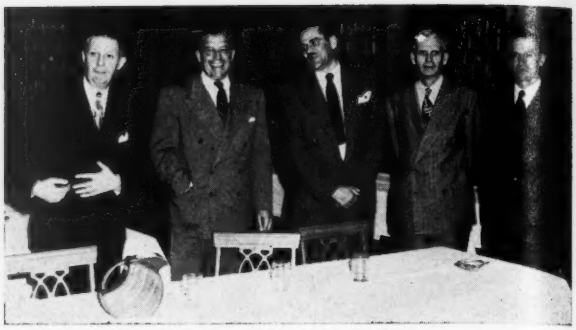
Phone 2-1350

Pipe For Every Farm and Oilfield Need

WESTERN OILFIELDS SUPPLY CO.

DISTRICT COMMITTEEMAN Lloyd Williamson, President of Mascot Oil, and friends, Charley Morgan, deputy county assessor; and C. R. "Chuck" Ball of Hillman and Kelley. (Ed. note: Lloyd Williamson is one of the oil industries finest and most able . . . Charley Morgan best dispositioned assessor . . . Chuck Ball . . . he used to play football on the "Spud" team at Greeley Colorado and attended C.C. at Colorado Springs. He lost the nickname when he spudded West . . . was surprised to be dubbed it again when he ran into an old Greelee 'spud' rooter).

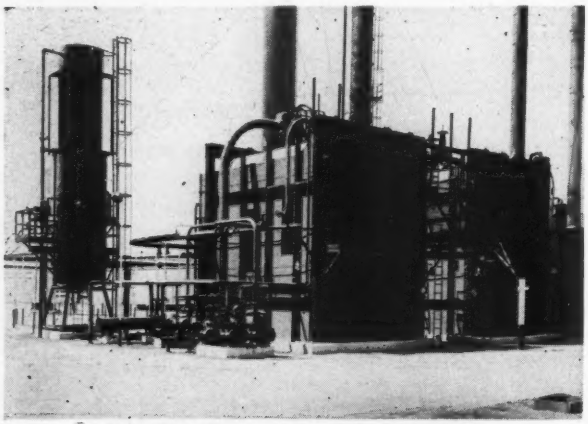


API AND CONSERVATION COMMITTEEWIGS: W. L. Hobro, chairman of the Committee; Robt. J. Bauer, general manager of Better Business Bureau, Los Angeles; Paul Andrews, chairman Engineer Board of CCCOPA; Jerry Bowen, general chairman National API and D. H. "Doug" Kingman, chairman San Joaquin Valley Chapter API. "RACKETS HAVE A NEW LOOK," said Bauer who also does a little conservation work for oil employers and employees.

placed by thermostat controlled "hoodiguys" which burn both gas and oil to warm up the crude. STERLING SHAY the assistant Manager and BOB MURDOCK the office Manager are very much interested at this time, and told us that RAY BURNER of San Francisco supplies all their burners and lives on Burne Street. Which reminds us of a baby doctor by the name of Dr. Stork. CHARLEY MANLEY the headman was not in so we did not discuss anything unimportant.

HOW MANY OIL FIELDS IN KERN? This is a fair question. Someone sent in 52 as of December 31, Midnight 1947. Is this correct?

NEW LOOK FOR LUBES is featured in several stories this month in various magazines and daily press of the state. The New Lube Look series began in "COW" for January by way of cut captions principally. Golden Bear has made many friends in the competitive field as well as in new pioneer extensions. Some of the East West



Boiler Plant Equipment installed at Bakersfield

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Completely automatic Oil Heating Plants
Johns Manville Insulation
Brick Work ★ Concrete Work

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Local and long distance hauling of petroleum products, drilling equipment, heavy machinery.
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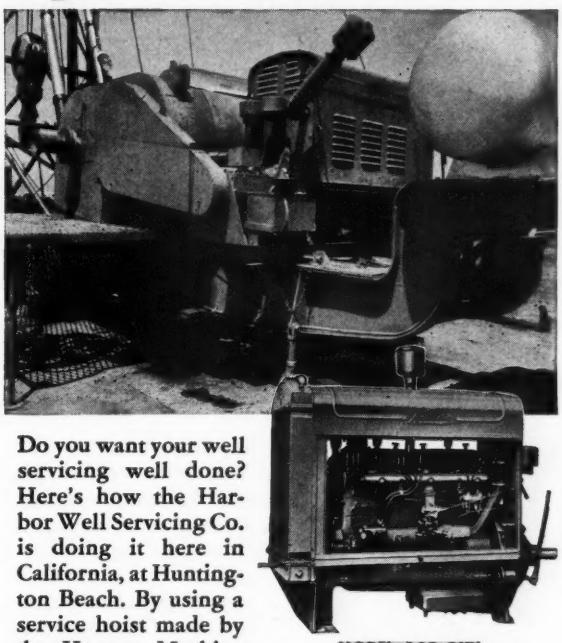
CALIFORNIA OIL PRODUCERS' Conservation Committee and API hold another meeting at Bakersfield Inn to discuss common programs and problems of conservation and protection. Listening to a speaker on another type of conservation program carried out by the BETTER BUSINESS BUREAU are W. T. Goold, TWA; Hugh M. Allen, Anchor Oil Company, Maricopa; Fred W. Flitcraft, and J. B. Wharton, Western Gulf Oil Company. Others as a part of the small section of a huge attendance are if you can find them: H. V. Dodd, State of California Division of Oil and Gas; Charley Prewett of Golden Bear; O. A. Cavins of Standard Oil of California; W. S. Ackerman of TWA; C. W. Stephens, Ohio Oil Co.; A. J. Rogers of Navy Oil Co.; Wm. C. Bailey, Div. of Oil Gas, Calif.; R. N. Ayers, Ohio Oil; George Suman, TWA; Orrie Luttrell, Byron Jackson; and many others.

"twain" has met in confirming western oils for a number of firms whose demands for eastern lubes could not always be promptly supplied, and readily reordered . . . during transportation duress.

★ "GOODFRIEND" RUSH BLODGET is being approached for assistance in building a **Petroleum Building** as a **living war memorial** to those who **served the industry** in Kern County, (the nation's leading county producer), and helped win the war. And to those who gave their 'last full measure of devotion'. New Kern County Fairgrounds would be desirable for a utility monument, say Kernoilwigs. ★

LOOKING PLEASED AND SURPRISED at the API and Conservation Committee (COPA) attendance are: M. C. "Barney" Barnard, local manager of CCCOP staff; A. B. (Tex) Newby, Southern California Gas Company and Past Chairman of API; and W. R. Wardner, Jr., General Manager of CCCOP, Los Angeles.

Well SERVICED by HOPPER... Well POWERED by WAUKESHA



Do you want your well servicing well done? Here's how the Harbor Well Servicing Co. is doing it here in California, at Huntington Beach. By using a service hoist made by the Hopper Machine Co. of Bakersfield, Calif. — Waukesha powered, of course.

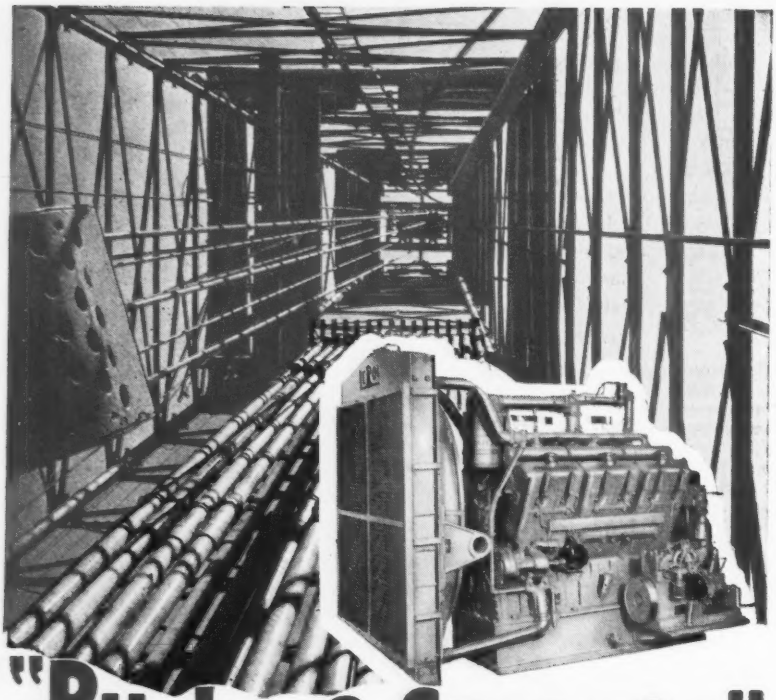
MODEL 145-GKU OIL FIELD POWER UNIT
six cyl., 5¼ in. x 6 in., 779 cu. in. displacement, burns gas or gasoline.

It's a lightweight, easily portable Waukesha Model 145-GKU Oil Field Power Unit. Burning either natural gas or butane, it develops 167 hp. maximum at 1800 rpm.

And what a power unit it is—this Waukesha six with the utmost power output and dependability *built in!* With husky 7-bearing, 3½ in. crankshaft . . . hard alloy exhaust valve seat inserts . . . removable wet sleeve cylinders . . . gear driven oil and water pumps . . . Waukesha non-hunting governor. Thermostatic by-pass system prevents over-cooling; insures quick warm-up and easy starting. Send for Bulletin 1225.

WAUKESHA MOTOR COMPANY, WAUKESHA, WIS.
NEW YORK • TULSA • LOS ANGELES

WAUKESHA OIL FIELD POWER



"PULLING STRINGS"
THAT GETS *FAST* ACTION
— power your drilling rigs with hard-lugging, quick-accelerating, dependable LE ROI engines . . .

Pulling strings is the only way you can complete a drilling contract. That is why Le Roi engines are found in every producing area. Drillers have learned to count on these Le Roi features for speedy completions:

● **Immediate response to the throttle.** Like a jackrabbit, Le Roi drilling engines get away fast. This quick acceleration helps to keep round-trip time to a minimum — you make hole faster.

● **Reserve power.** Le Roi engines are conservatively rated. This means that they can give that extra something often needed when the going is tough — when there are unusual peak loads to handle.

● **Less down time.** Bears for punishment, Le Roi engines just don't know when to quit. This dependability is backed by complete parts stocks close to your base of operations. Moreover, Le Roi drilling-engine parts are 100% interchangeable. This feature and easy accessibility greatly reduce maintenance time.

Pull strings — get in touch with your Le Roi distributor. He can show you why Le Roi engines make hole faster — how you can select from the 4 to 600 horsepower range, just the right engine for your job. Write for latest literature.

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North & West Texas, New Mexico
Carson Machine and Supply Co.—Great Bend Falls, Odessa, Lubbock, Texas.

Kansas
Carson Machine and Supply Co.—Great Bend

Illinois — Western Kentucky
Western Machinery Company — Centralia, Illinois and St. Louis, Missouri.

Michigan
Hafer Engine Co. — Reed City

Rocky Mountain Area
Industrial Power Units, Inc. — Casper, Wyoming.

Northern Louisiana & Mississippi
Ingersoll Corporation — Shreveport, Louisiana, and Jackson, Mississippi.

West Coast
Le Roi-Rix Machinery Co. — Los Angeles, Calif.

Appalachian Area
Lloyd, Smith Company — Bradford, Penn.
P. C. McKenzie Co. — Pittsburgh

Canada
Drilling Supplies, Ltd. — Calgary, Alberta

Complete Sales and Service Facilities

P-93

IMPORTANT NEWS ITEM last month showed that most of California's Southern County's assessors at the last "taxession" had oil on their mind. Many of the counties were represented as far north as Fresno and their gas and oil taxperts were marked present. Josh Hanks made a creditable showing with Al Fritsche, Ed. Wolf and John Watts from various departments who were conscious of Kern's close approach to the half billion dollar assessed valuation. Paul J. Howard was on the outside looking in.

API'S COALINGA KETTLEMAN Chapter heard an address by Doug Jones the other meeting or so ago. Doug hails from Axelson Pump Company and was a guest of the neighboring County's API-WIGS regular meeting. He spoke on the subject dealing in developing of materials used in drilling wells. Sharing mathematical and technical knowledge in search of oil is most important he thought. "Scribe" H. T. Frasier reported attendance from far and near.

FLORENCE HOLTON popular Secretary in the Conservation Committee headquarters in Haberfelde Building Bakersfield is looking for help. Help in finding an apartment large enough to accommodate herself and parent. Some of the oil-wigs big and little have asked us to help too. Florence is going back to Texas if we don't and Barney Barnard is going to be minus one right arm.

THE OTHER DAY an oilman asked us how many of his fraternoil brethern used the Skyways in Kern. County airport 1947 figures give 182,463 landings and takeoffs . . . about a plane a minute. That's a 100 thousand over 1946 from the two score and ten airports. Almost every "Mainliner" has an oil man and a half per trip getting on or off at the airport according to our dope and data.

IN KERN COUNTY this month an opportunity arrives for almost anyone who wants it, to buy a $1000.00 on easy terms. KERN COUNTY BANK'S genial personnel will show you how to buy it. How many times have we run across

an old installment payment book with all the lines and columns filled in. It seemed ages to complete it and when the book was filled it was worthless. Well, according to the bank here is a chance to reverse the practice and end up with a negotiable instrument . . . worth a $1000.00. DOWN PAYMENT is $4.72 and the same amount for 208 weeks. Due consideration will be given any increases in interest during the four year period, as the original plan was to allow only 1%. Presently the interest rate is 1½% which will mature the plan with an excess dividend of $9.12.

SOME OF THE ELDER-STATESMEN in banking fraternity about the year of 1924 will be delighted to know their idea about savings has not been in vain.

TO THE ADMINISTRATIVE staff of the WESTERN OIL-FIELDS SUPPLY COMPANY have been added: One Walter Gerald Lake . . . the eldest son . . . graduate engineer of USC in charge of the "WoSco" problems now on the planning boards. And to the Sales office SAM TRUAX popular member of the second generation of junior executives being properly added and taking their respective places in the American industrial pattern since VJ day. Sam Truax has done a fine job as his part in the community already. Presently he has the handicapped Boy Scout Troop which has to mobile on crutch, wheel chair and cane.

JOHNSON VALVE SHOP orders for service, and rehabilitated valves is showing an upward swing of industrial repeat orders. Owen thinks their business extension practice has brought results. "Once we contact the need and have a chance to demonstrate the quality of our work we seem to get the second opportunity to service the client and that is a gratifying reaction," said Owen.

ISABELLA Dam has a contract at long last after fifty years of strife and growing pains with East and West affairs of state and commerce and the steady movement of population this way.

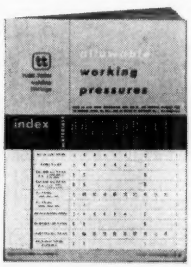
RAND CONSTRUCTION has the contract for the Eastern portion of the dam just below the confluence of the Kern Rivers. Best news of all happens to be that the oil industry's allied construction people will be negotiating for a sub contract with Rand.

HARRY PHOENIX of the OIL-FIELDS TRUCKING will be figuring plans for the next fortnight as an assist and a righthand subcontractor is always necessary. JOE M. HILDEMYER big boss of the Tank Division of Oilfields Trucking is another potent factor in the organization and he helps Harry to help make things clank.

CONGRATULATIONS are in order now for the new president of the Stockdale Country Club and since his picture and name have been running up the certain cashier register of a certain service club to which he belongs the writer is going to commiserate him and stop the fining penalty clock for a change and let you guess who he is, as if you did not know already.

HOW STRONG?

is a Welding Fitting



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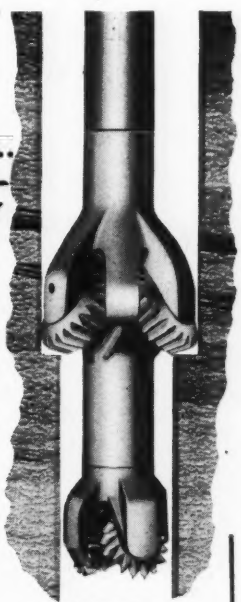

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Los Angeles Basin

Palmdale Try Works

Antelope Valley Development Co. is cleaning out at 2810 ft., preparatory to resuming drilling operations with Del Sur No. 1 in Sec. 26-7n-13w in the Palmdale area of Los Angeles County. Total depth is 3025 ft.

Seal Beach Well Starts

Marine Exploration Co. has piling in for its State No. 2 in Sec. 11-5s-12w offshore Seal Beach, Los Angeles County. The project will be drilled at a high angle to beds beneath the ocean floor about a mile from the beach.

Chino Hills Test Drilling

Drilling is nearing the 1100-ft. mark in Chino Hills Oil Co.'s Chino Hills No. KB-4 in Sec. 33-2s-8w in the Chino Hills, San Bernardino County.

Oak Canyon Well Drills

Western Gulf Oil Co. was last reported making hole ahead at 2850 ft. with USL-F No. 13 in Sec. 31-5n-17w in the Oak Canyon area. Production at Oak Canyon was opened up by the company first in February, 1941.

Brea-Olinda Test Coring

After losing and successfully recovering drill pipe, Union Oil Co. is drilling and spot coring at 3399 ft. with Gaines No. 1 test in Sec. 10-3s-9w in the Brea-Olinda area, Orange County.

Santa Ana Try Redrills

Near Santa Ana Gardens in Orange County, Tide Water Associated Oil Co. is redrilling at 6120 ft. with Martin No. 1 wildcat in Sec. 21-5s-10w. Original bottom is 6554 ft.

Inglewood Area Still Developing

Basin Oil Co.'s oil development campaign in the Inglewood area currently includes two active drilling jobs. No. 5-1 in Sec. 28-2s-14w is coring at 10,072 ft. No. 7-1 in the section is drilling sand and shale at 8855 ft. The company has four more wells programmed there.

Newhall Area Wildcat Scene

Mutual Development Corp.'s Sanborn No. 2 wildcat in Sec. 6-3n-16w in the Newhall area is making hole ahead below 1250 ft. Bankline Oil Co., meanwhile, is drilling hard shale at 9098 ft. with Newhall Corp. No. 1 in Sec. 31-4n-16w.

Los Angeles Well Reaming

E. W. Pauley is reaming with Pacific Tube-Stewart No. 1 test in the East Los Angeles area, with hole down 8250 ft. Drilling has reached 8735 ft. in General Petroleum Corp's Industrial No. 1 in Sec. 8-2s-12w.

Richfield Oil Corp. is rigging up to start the drill in Boyle Comm. No.

Union Pacific's Offset #81 (Loffland Bros. drilling contractor) Left to right: L Vandervert, Cathead; John M. Moore, Floor Man; A. Friesen, Driller; J. D. Yoho, Derrick Man; and Arthur Benoist, Floor Man.

17-1 in Sec. 35-1s-13w. The company's L. A. River Fee No. 1 in Sec. 34-1s-13w, and Vail No. 4 in Sec. 9-2s-12w have been abandoned at 4618 ft. and 8657 ft., respectively.

Aliso Canyon Test Drilling

Having completed a minor fishing job, Standard of California has resumed drilling with Del Aliso No. 2 in Sec. 29-3n-16w in the Aliso Canyon area and at last reports was down 1690 ft. Northwest of the Santa Fe Springs field, the company is drilling and spot coring at 13,006 ft. with Houghton Comm. No. 1-1 in Sec. 36-2s-12w. Six Companies No. 4 in Sec. 2-3s-15w northwest of El Segundo is in the completion stage at a redrilled depth of 6730 ft. Old bottom is 6852 ft. Six Companies No. 1 in the section was recently completed at a redrilled depth of 6934 ft. for an initial yield of 17 barrels of 13.7 gravity oil daily, cutting 14 per cent.

Castaic Try Works

Cleanout operations are in progress at L. R. Wilhite and Claude Kavanaugh' Jenkins No. 1 in Sec. 18-5n-16w in the Castaic area. The hole will be carried on down from present depth of 1560 ft.

Dominguez Well Tests

Morton and Sons is preparing to gun perforate the fifth zone in its Dominguez Estate No. 1 in the Dominguez area as a prelude to placing the project on production with three zones open. Total depth is 8144 ft., with casing set at 7807 ft.

Lawndale Active Area

Seaboard Oil Co.'s Seaboard Comm. No. 6-1 in Sec. 20-3s-14w in the Lawndale area is drilling steadily ahead below 1750 ft. The project, which is located about 500 ft. south of Rosecrans Blvd., near Ocean Gate Ave., is drilled directionally to the north. The company's Seaboard-Pauley No. 61-20 in the section is rigged up and about to spud.

Seaboard several weeks ago brought new life to the area by completing its Pauley-Seaboard No. 81 from a zone deeper than tapped heretofore in the area. Lawndale at one time was a boom field. Production, however, decreased at a rapid rate.

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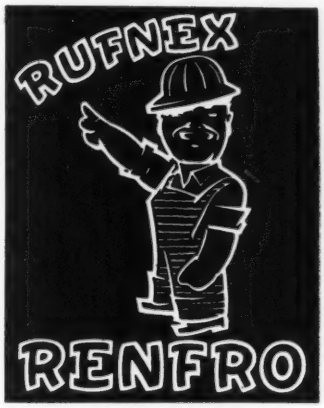

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San Joaquin Valley

Edison Well Drills Schist

Jergins Oil Co. and Texas Co.'s Young Fee No. 5A in Sec. 23-30s-29e in the Edison area is drilling in hard schist at 2547 ft. On formation test of the interval of 2477-2492 ft. gas showed in quantity and no oil. Location is near Fee No. 5 which was drilled and abandoned some years ago. No. 5 pumped oil for a time from a plugged depth of 1995 ft. It was given up when output declined to a few barrels.

Elkhorn Valley Wildcat Starts

West of Taft on the southwest flank of the Temblor Range in the Elkhorn Valley area in San Luis Obispo County, Elkhorn Oil and Development Co. is starting an interesting exploratory job. Approximately 12,000 acres are understood to be in the lease. Officers of the company include R. B. Watkins, John Malcomson and William Provost.

San Emigdio Try Sets Pipe

Apex Petroleum Co. has cemented 7-in. casing at 1400 ft. in its Los Lobos No. 3 in Sec. 5-10n-22w in the San Emigdio area and is preparing to run liner for conventional trials. Total depth is 1481 ft., with top oil sand at 1410 ft. Continental Oil Co.'s K.C.L. No. L-2 in Sec. 8-11n-21w is drilling through hard brown shale at 12,835 ft. Santiago No. 1 in Sec. 8-11n-22w is making hole in hard sand at 9156 ft.

Edison Try Cleaning Out

West of the Edison field, First National Finance Corp. has started cleanout operations with its De Mille-First National-Jeppi No. 1 in Sec. 17-30s-29e, which sanded up, after coming in for 500 barrels daily from 30 ft. of oil sand in streaks from 3290 ft. to bottom at 3449 ft. Location has been made for De Mille-First National-Biggar No. 1 in the section.

Mount Poso Well Listed

O. W. S. Oil Co. of Long Beach is ready to start work on a new drilling job on the south half of the northeast quarter of Sec. 22-26s-28e in the Mount Poso field. J. G. Leland's Jane No. 1 in Sec.. 6-27s-29e is idle at 250 ft.

Sharktooth Try Coring

Barnsdall Oil Co. is coring shale at 2711 ft. with its El Portal Mining Co. No. 2 in Sec. 15-28s-28e in the Sharktooth area. Independent Exploration Co., meantime, is bailing its Swan No. 2 test in Sec. 15-28s-28e. Total depth is 2740 ft., with top Vedder oil sand at 2720 ft.

McKittrick Test Deeper

West of McKittrick in Sec. 9-30s-21e, General Petroleum Corp.'s wildcat Ninkovich No. 62-9 has reached 8959 ft. Berry No. 11-15 in Sec. 15-28s-20e at Shale Hills is drilling shale at 7856 ft. Cottonwood-So. Cal. No. 22-30 on wildcat ground near the Edison field is drilling at 3425 ft. The latter is located in Sec. 30-29s-29e.

Buena Vista Project Digs

In the Buena Vista area, Western Gulf Oil Co. continues to drill ahead below 7100 ft. with its B. V. A. No. 18-3 wildcat in Sec. 3-23s-25e, Kern County. The company's U.S.-Case Comm. No. 1 test in Sec. 23-11n-23w in the Santiago area is idle at a plugged depth of 3002 ft. The hole was carried first to 3483 ft. before redrilled to 3048 ft.

Edison Test Programmed

Charles H. Chase has staked location for a wildcat test east of the Edison field in Sec. 8-30s-30e. Known as No. 1, the venture will prospect about a half mile southeast of J. E. Johnson's Dan Mettler No. 1, which suspended operations early in 1946 at 5060 ft.

Comanche Pt., Wildcat Drills

A. J. Crevolin and J. H. Novelli's No. 1, a basement test in Sec. 32-11n-18w at Comanche Point, is drilling shale at 1680 ft. Nothing of interest has been reported to present depth.

Los Nietos Co.'s East Long Beach Community #1 (Loffland Bros. drilling contractor) Left to right: Jess Sparks, Floor Man; B. F. Fulbright, Derrick Man; H. B. Ferguson, Driller; C. J. Brown, Lee Tongs; and Otis Davis, Cathead.

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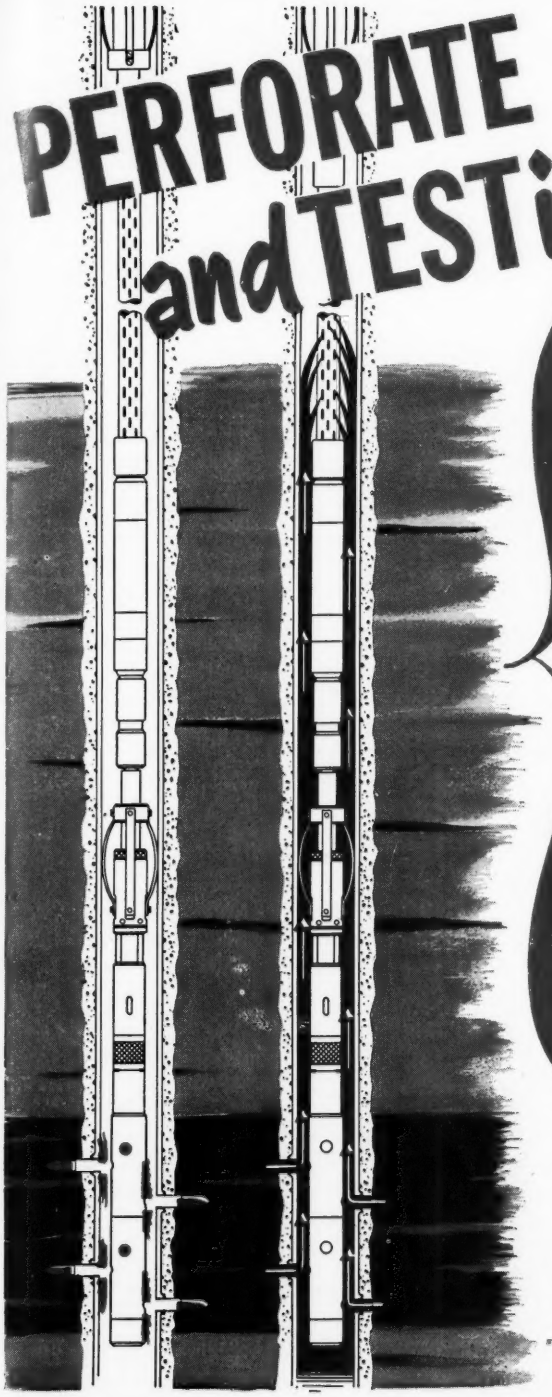

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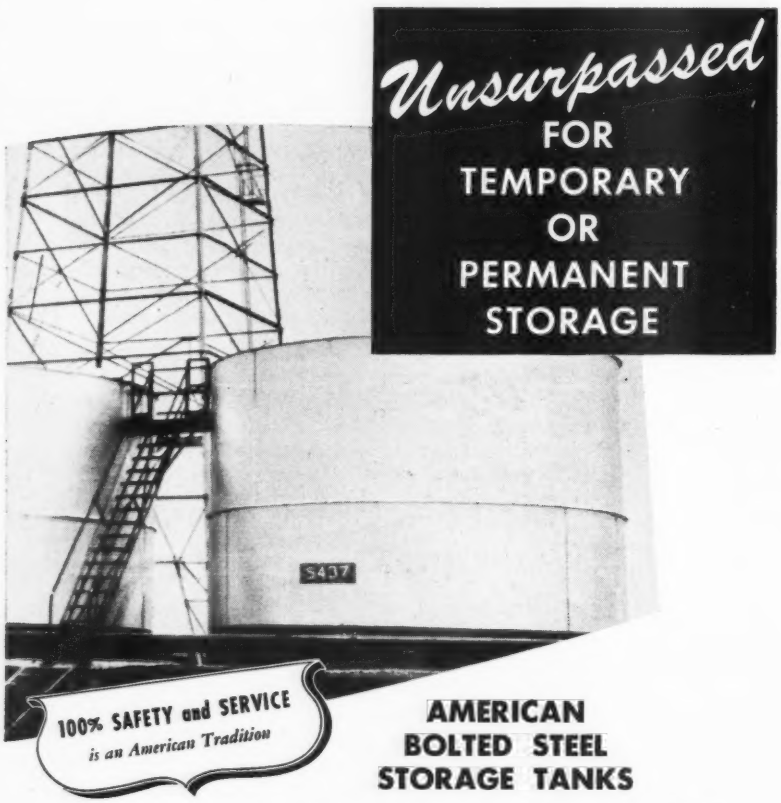
Globe Anticline Wildcat Deepening

Shell Oil Co. continues to drill deeper with its Vedder-USL No. 1 wildcat in Sec. 9-31s-22e in the Globe Anticline area. The hole is down 4630 ft. The company has added another well at Kern Bluff. The new well is Wells-McGregor Fee No. 3 in Sec. 7-29s-29e, which is pumping about 125 barrels daily. Total depth is only 947 ft.

Antelope Try Drills

In the North Antelope area, Texas Co. is drilling and spot coring at 4325 ft. with Voight Two No. 1 wildcat in Sec. 32-27s-20e. Westpet NCT One No. 87-29 in Sec. 29-30s-22e near McKittrick is running Halliburton test, after perforating from 7475 to 7500 ft. Total depth is 7905 ft.



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Devils Den Test Drills

Drilling in Sec. 25-25s-18e in the Devils Den area, S. R. DeKalb has reached slightly below 1300 ft. with Blake No. 16 wildcat.

Buena Vista Wildcat Digs

Continental Oil Co. is drilling at 5350 ft. with its interesting exploratory hole known as No. 0-1 in Sec. 9-31s-26e near Buena Vista. Location falls about three miles southeast of Ten Section and one mile southwest of Richfield's Old River K.C.L. No. 1 which was abandoned at 9190 ft.

Temblor Try Reams

Having redrilled to 2927 ft. with its British American-Dodds-Thomas Unit No. 1 wildcat in the Temblor area, Continental Oil is reaming. Original bottom is 3228 ft. In the West Temblor area, Signal Oil & Gas Co. is drilling at 1635 ft. with Signal-Westates No. 2 in Sec. 35-29s-20e.

Paloma Try Digs

Ohio Oil Co.'s KCL-B No. 41-30 test well in Sec. 30-31s-26e in the Paloma area is drilling on down at 8155 ft.

Cuyama Valley Test Drilling

F. R. Anderson & Associates has resumed drilling with Hadley No. 1 test in Sec. 25-11n-28w in the Cuyama Valley area, San Luis Obispo County. Present depth is 1911 ft. and indications are that prospecting will be carried forward to somewhere around 2200 ft. for another test. The interval of 1840-1895 ft. was subjected to trial.

Bacon Hills Test Drills

Drilling and spot coring at 3515 ft. is the latest word from Seaboard Oil Co.'s No.58-21 wildcat in Sec. 21-28s-20e in the Bacon Hills area.

Progress is the American way of life. The petroleum industry is progressive.

Coastal and Northern District

Olivera Canyon Wildcat Starts

Pacific Western Oil Corp. is grading ground for its Williams No. 1 exploratory hole in the Olivera Canyon area in Sec. 18-9n-32w, Santa Barbara County. Union Oil Co.'s Wickenden No. 1-28 test well in Sec. 28-9n-32w is down 6508 ft. and testing.

Kirby Hills Adds Interest

Southern California Petroleum Corp. and Angeles Mesa Land Co. have completed an operating agreement with Honolulu Oil calling for the drilling of a gas well on a large block of acreage in Solano County.

Southern California Petroleum announced that the property involved adjoins production areas developed respectively by Standard of California and Shell Oil Co. at Kirby Hills, where the latter recently finished Lambie No. 5 in 25-4n-1w as 4,720,000 cubic ft. daily. Shell, in a gas well producing at the rate of

cidentally, is rigging up on Sec. 14-4n-1w to start Harper No. 1.

Sespe Well Now On Pump

Republic Operator, Inc., has placed on the pump its Arundell No. 6-1 in Sec. 6-4n-19w in the Sespe area for an initial output of 87 barrels daily. The project sanded up when first completed, a situation remedied by a cleanout job.

The Republic well is in a cluster of old wells, which have been pouring out oil as long as 50 years. None of these old producers went below 3000 ft.

San Ardo Try Cores Oil Silt

Jergins Oil Co. and North American Cons. Oil Co.'s McCool Three No. 2 test in Sec. 15-22s-10e in the San Ardo area cored about 50 ft. of oil stained silt above basement. A test of the interval of 1691 ft. and bottom at 1756 ft. was not conclusive. McCool Three No. 1 in the section has been abandoned at 2327 ft. in granite. Granite was topped at 2324 ft.

Sulphur Mtn. Test Rigging

Rotary is being rigged for L. M. Lockhart's No. 2 in Sec. 27-4n-23w in the Sulphur Mountain area, Ventura County.

Huasna Test Ready To Swab

Danciger Oil & Refining Co. is ready to swab for production from the interval of 4062-4440 ft. in its Twitchell No. 1 in Sec. 35-32s-15e in the Huasna area, San Luis Obispo County. Drilled to a total depth of 5109 ft., test of the interval of 4062-4988 ft. swabbed water showing some heavy oil and gas.

Gato Ridge Venture Digs

General Petroleum Corp. is drilling below 4600 ft. with its Price No. 1 explorer in Sec. 18-8n-32w near

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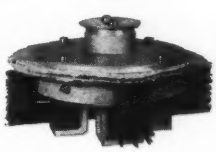

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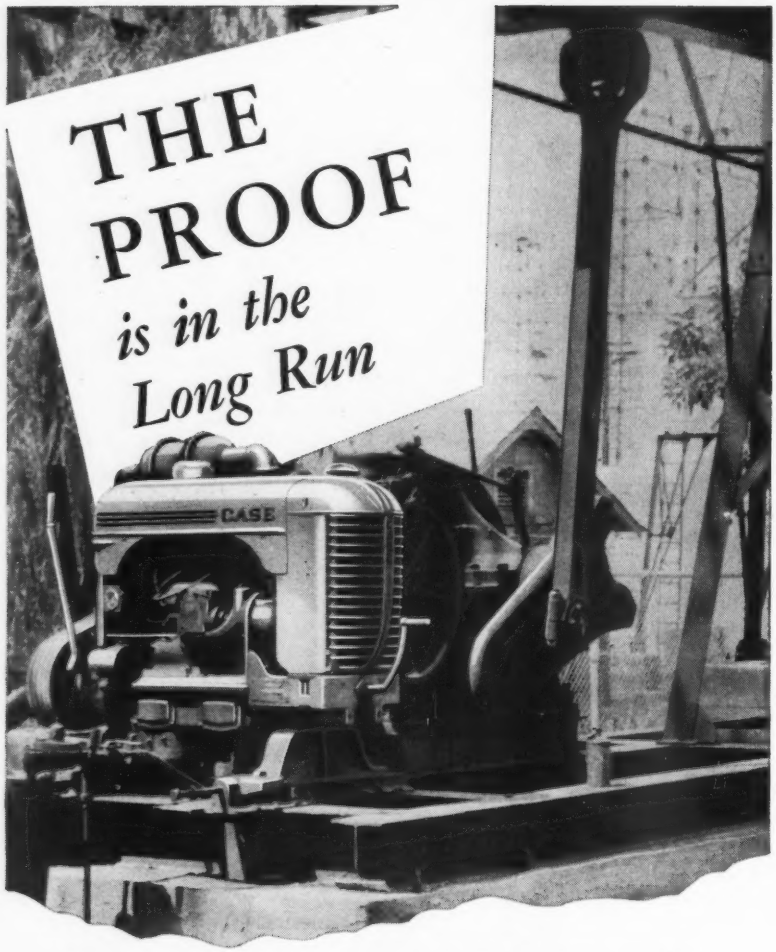

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CASE

the Gato Ridge field. The company has abandoned its Fullerton No. 1 prospect hole in Sec. 31-9n-32w in the Cat Canyon area, after the well pumped but little fluid from 3800 ft.

Montalvo Developing

Richfield Oil Corp. has started the drill with Bailard Mee No. 1 test in Sec. 20-2n-22w in the Montalvo area near Oxnard in Ventura County. Hole is now being made below 1750 ft. Location is not far from the company's Del Cielo No. 1, which was completed at 10,400 ft. Standard of California is drilling at 3270 ft. with Eastwood No. 1 in Sec. 33-2n-22w. McGrath No. 62 in Sec. 25-2n-23w is going deeper at 2028 ft.

Zaca Venture Drills Ahead

On the Davis lease in the Zaca area, Tide Water Associated Oil Co. is drilling shale at 3615 ft. with No. 35 in Sec. 33-8n-31w, Santa Barbara County. The company's recently completed Chamberlin No. 51 in Sec. 32 and Luton No. 135 in Sec. 29-8n-31w currently are producing 70 and 145 barrels a day, respectively. The former went to a total depth of 6215 ft., and the latter, 5301 ft.

Elwood Try Rigs

J. W. Rice and Leonard Firestone are rigging derrick to begin drilling Doty No. 2 wildcat in Sec. 11-4n-29w in the North Elwood area.

South Mtn. Try Rigging Pump

R. E. Havenstrite is rigging his Price No. 1 in Sec. 19-3n-20w in the South Mountain area to pump from a finishing depth of 5250 ft. Approximately 40 ft. east of the well site, rig is being skidded in to location for Price No. 2 in the section.

Goleta Wildcat Plans Plugging

Honolulu Oil Corp. is preparing to plug back from 6920 ft. with Signal-Macco-State No. 309-2 in Sec.

19-4n-28w in the Goleta area and run casing to a depth approximating 6700 ft.

Simi Adds Production

Union Oil Co. has completed at 1980 ft. its Canada de la Brea No. 11 in Sec. 32-3n-18w in the Simi area for 34 barrels of 27.9 gravity oil a day, cutting 1.3 per cent. Santa Rita No. 1 in Sec. 11-7n-33w east of Lompoc is a location.

Saticoy Test Washing Over

Superior Oil Co.'s Saticoy No. 1 wildcat in the Saticoy area in Sec. 10-2n-22w is still tied up with a drill pipe fish. The company at last reports was washing over at 12,379 ft., with top of fish at 12,237 ft. Present depth of the well is 13,581 ft.

Bardsdale Well Drills

Cleveland Oil Co. is drilling below 2000 ft. with its Burson No. 1 on a 40-acre lease in Sec. 6-3n-19w in the Bardsdale field. Drilling recently on its Elkins lease, the company completed Elkins No. 3 in Sec. 7-3n-19w at 6732 ft. for a substantial yield.

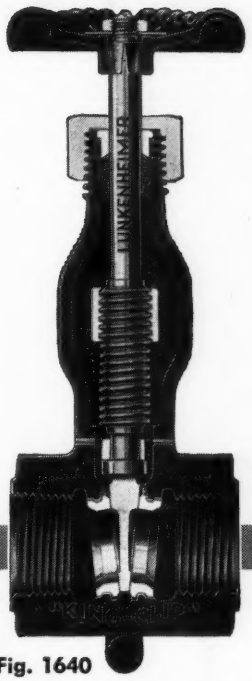
Fourdeer Well Digs

On the Los Flores lease in the Fourdeer field, Sunray Oil Corp. is making hole steadily ahead at 4750 ft. with well No. 7 in Sec. 4-8n-33w.

It is worthy of note that Sunray's net crude oil production was increased 3,000,000 barrels last year over 1946. The company in 1947 scored 12,435,250 barrels of produced oil, against 9,481,469 in 1946. Sunray refineries at Santa Maria and Allen, Okla., are running at a combined throughput of approximately 12,000 barrels a day of crude oil charge.

Salinas Job Tests

Southwest of Salinas, Sand Bowl Corp. is testing water shut off with Metz No. 1 in Sec. 1-15s-1e, Monterey County. Casing is set on bottom at 800 ft.



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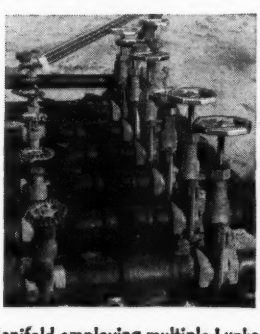
with LUNKENHEIMER "KING-CLIP" VALVE

Fig. 1640

The Lunkenheimer "King-Clip" Valve has one quality feature after another... from the coarse, heavy stuffing box threads and hex-head gland which minimize stuffing box troubles... to the heavy body which resists wrenching and piping strains... and the heavy rust-proofing treatment, inside and out. Each feature adds longer life, lower maintenance and better service, wherever small and medium sized gate valves are used.

Note the ample, unobstructed drain channels and bronze thread bushing, features originated by Lunkenheimer, as was the "King-Clip" Valve itself. The Lunkenheimer "King-Clip" Valve is truly the king of all clip type valves... widely used for more than 50 years and, today, better than ever for longer, low-cost service.

ESTABLISHED 1862
THE LUNKENHEIMER CO.
"QUALITY"
CINCINNATI 14, OHIO, U. S. A.
NEW YORK 13 CHICAGO 6
BOSTON 10 PHILADELPHIA 34
EXPORT DEPT. 318-322 HUDSON ST., NEW YORK 13, N. Y.



Manifold employing multiple Lunkenheimer "King-Clip" Gate Valves. Note the compactness of the installation and the convenience of the bolted bonnets, each of which is readily accessible. "King-Clip" Gate Valves are furnished in 21 standard types, with iron body-bronze trim, all-iron or iron body-alloy trims and with inside or outside rising stems for various service needs.

ASK YOUR DISTRIBUTOR

Consult your valve specialist, the friendly near-by Lunkenheimer Distributor. He has a stock of "King-Clip" Valves as well as other fine Lunkenheimer products. Ask for Bulletin 561 which details the 21 standard types of "King-Clip" Valves.

LAUGH THIS OFF!!

"I was so cold last night I couldn't sleep. I just lay there and shivered."

"Did your teeth chatter?"

"I dunno. We don't sleep together."

A newly married couple boarded the Golden State Limited for their honeymoon. They were in their berths and the bride about every two minutes would exclaim: "Johnny, I just can't convince myself that we are married." This went on and on for half an hour. Finally a voice from the other end of the car shouted, "Johnny, will you convince her so that we all may go to sleep?"

A house-to-house salesman rang the bell of a cheap-looking house. As the door opened he tossed in a carefully prepared mudball which disintegrated and made a mess of the front room rug. "Now, don't get excited lady," he said calmly. "I am demonstrating the Super Duper electric vacuum-cleaner. If this little wonder doesn't remove every trace of dirt on your rug, I'll eat the whole mudball!"

The indignant housewife left for the kitchen, returning in a few moments bearing a tray containing a bottle of ketchup, a jar of mustard, salt, pepper—and a rolling pin. She deposited the condiments with elaborate care, then picked up the rolling pin and hefted it expertly.

"But, madam," exclaimed the startled salesman, "I don't understand."

"Start eating!" commanded the housewife. "We ain't got no electricity!"

"Do you serve crabs here, waiter?"

"Yes, sir. We serve anyone. Be with you in just a minute."

Joe: "Have you got a picture of yourself?"

Roommate: "Yeh."

Joe: "Then let me use the mirror, I wanna shave."

First Actress: "I wonder if my public will still appreciate me when I'm old and feeble."

Second same: "Why, of course they do!"

Pvt. Jackson was on the carpet for the third time in as many days. The captain was stern. "Did you call the sergeant a liar?" he demanded.

"I did, sir," admitted Jackson. "And a louse?"

"Yes, sir."

"And did you also say he was a cockeyed, knock kneed, dirty tongued stooge?"

Jackson hesitated, then said very regretfully, "No, sir. I forgot that."

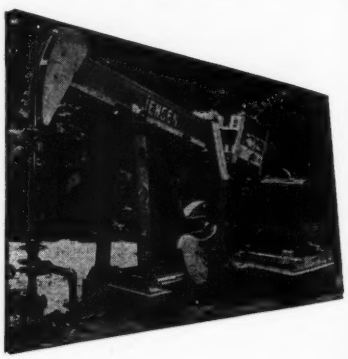
"I understand your grandmother is the old-fashioned type who still toils at the spinning wheel. Does she earn much?"

"Well, last night she won $50 on the red."

"Who was Tallyrand?" asked the professor.

"A fan dancer, and please cut out the baby talk," answered the bright pupil.

Why JENSENS Pump



More Profitable

The open market—supply and demand—establishes crude prices. You can't control this. Therefore, the best way to raise production profit is to cut costs.

Producers the world over have found that Jensen Pumping Units do cut production costs: the initial cost is reasonable, one-step gear reduction has less friction—cuts fuel costs, rugged design throughout saves repair and maintenance costs—to name only a few Jensen advantages.

Prepare for the time when your wells will have to go on the pump. Get the facts now on Jensen units. See your near-by dealer, or write to Coffeyville.

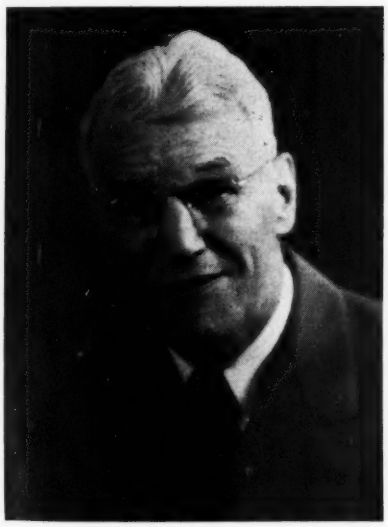
Stocked by
THE OIL TOOL CORPORATION
3075 Cherry Ave., Long Beach, Calif.
Phone 481-81

JENSEN BROTHERS MFG. CO.
COFFEYVILLE, KANSAS, U.S.A.
EXPORT OFFICE, 50 Church St.
New York City

Personalities IN THE NEWS

Emsco Structural Engineer Wins Lincoln Award

Mr. H. D. Hilborn, Chief Structural Engineer at the Houston Plant of Emsco Derrick & Equipment Company, was recently awarded the Lincoln Award for his paper on the design and construction of the new Emsco 18 P Bulge Type Portable Mast for drilling to depths in excess of 15,000 feet. In competition with entries received from all six continents, Mr. Hilborn received the second highest classification award and was presented a cash sum of $2200.00 The Lincoln Award is made periodically by the Lincoln Electric Company for outstanding achievement in connection with scientific research and development. Total awards amounted to $200,000.



H. D. Hilborn

Many outstanding design features are incorporated in the new Emsco 18 P Portable Mast. The new mast is 136 feet in height. It has a crown block capacity of 800,000 lb. Base dimensions of 16 feet by 26 feet are sufficient to accommodate the largest draw works. The 26 foot dimension carries up vertically to the working platform providing twice the racking capacity of conventional portable masts. As a result of this construction, 192 stands of 4½" O.D. drill pipe may be racked in one bulge, keeping inside stands five feet from the center of the well. For barge workover operations, the 18 P Mast may be equipped with two bulges permitting racking of both drill pipe and tubing simultaneously.

Mr. Hilborn was born in Erie, Pennsylvania. He received his B.S. degree in Civil Engineering from Allegheny College at Meadville, Pennsylvania. Mr. Hilborn has had varied experience in the structural engineering field. Following his college training, Mr. Hilborn became affiliated with the Burlington Railroad as a bridge engineer. He was chief architectural engineer for the Cudahy Packing Company for several years. Prior to his association with Emsco, Mr. Hilborn was in private practice in Miami, Florida, where he designed and supervised the construction of several large office buildings.

Off-the-record speaker at the Eight-Ball dinner at the Greater Los Angeles Press Club was Edwin W. Pauley, president of the Petrol Corp., who recently resigned his post as special assistant to the Secretary of War.

Robert Lytle's horse, Picture Pal, the first time out at Santa Anita, came in an easy winner and paid the handsome price of $81.70.

LeRoy M. Edwards, Pacific Lighting Corp's vice president and general manager, has been elected a director of the American President Lines. He will fill the vacancy on the steamship company's board caused by the death of A. Emory Wilson.

E. P. VALBY, CHAIRMAN, C.N.G.A. TECHNICAL COMMITTEE
Richfield Oil Corp., Long Beach

Ed has been actively associated with the technical work of C.N.G.A. since he first joined in 1927. Just recently he has returned from a meeting of the ASTM Committee on Lighter Hydrocarbons in Washington, D.C. where he represented this association. In March Mr. Valby will give a paper at the N.G.A.A. Spring Meeting in Fort Worth and attend discussions on technical matters pertaining to the Natural Gasoline industry. During his two years as chairman of this committee the association has published TS-461, "Tentative Standard Procedure for the Determination of Superexspansibility and Manometer Factors Used in the Measurement of Natural Gas By Orifice Meter in Excess of 500 psig" and the latest edition of TS-351 which is the "Procedure for the Determination of Gasoline Content of Natural Gas."

When time allows, Ed enjoys living in Long Beach where his career as a chemist started in the labs of the local high school.

Marc D. Leh and Dave E. Brown have been elected directors of Eagle Oil & Refining Co., according to an announcement by J. Dave Sterling, president of the company. The new directors will be associated actively with the future management of the concern.

New D+B Chief Engineer

Mr. Dan Duncan, Executive Engineer of Emsco Derrick & Equipment Company, announces the appointment of Mr. David A. Carnahan to the post of Chief Engineer of the D+B Division of the Company. Dave has had wide and varied experience in the oil industry, dating back to his birth on the Shell Lease at McKittrick, California. He

David A. Carnahan

attended Stanford University where he graduated with an engineering degree. Following graduation, he worked in practically every field in California. Prior to the war he was affiliated with D+B in the Engineering Department. During the war, Dave was a Lieutenant in the Navy, specializing in ordinance research and development. He spent ten months overseas and upon his return was in Washington for seven months teaching bomb disposal. He was then sent to Inyokern, California Naval Ordinance Test Station, Rocket Development Station. In his new capacity as Chief Engineer for B+D, he will supervise the development and engineering of subsurface equipment at both the Dallas and Los Angeles Plants of D+B.

Al Heller, Los Angeles geologist and engineer, is spending considerable time in the Cuyama Valley area, where he holds interest in a number of properties.

William Horner of Barnsdall Oil, spoke at the Los Angeles University Club before the petroleum chapter of American Institute of Mining and Metallurgical Engineers. His subject was "Pressure Maintenance by Water Injection at the Midway Field in Arkansas." Horner makes his headquarters at Barnsdall's home office at Tulsa.

Jack McKay, Texas Co., has won the National Safety Council's president medal. He was presented the medal by Charles A. Miller, Texaco safety director at Houston, Tex., at a meeting of company producing supervisors at Long Beach. McKay saved the life of a fellow employee by the prompt application of the Schaffer prone pressure method of artificial respiration.

Harry D. Campbell has joined Franco Western Oil Co. as production engineer, W. D. Waltman, president of the company, announced. Campbell during the war saw service in both the Atlantic and Pacific theaters as a Navy lieutenant. At one time he was with Union Oil Co.

W. C. (Bob) Murcell, 53, well-known Los Angeles oilman, died of a heart ailment at Scripps Clinic in La Jolla. Born in Oakland, he attended school there and was a veteran of World War 1. He leaves his widow Betty and a brother Leo of Oakland.

Installment of the Southern California Gas Co.'s 1,000,000th meter has been announced by President F. S. Wade. This means the company now serves a population of nearly 3,900,000, Wade stated.

After the Mardi Gras and New Orleans, Russell Havenstrite flew his private plane to Florida for a visit and is now back in Los Angeles.

Gene Powell, Barnsdall Oil's district geologist at Bakersfield, is transferring his activities to Alberta, Canada, where he will head the company's geological department.

Schmidt Advanced by U. S. Steel

Appointment of Charles N. Schmidt as assistant director of advertising, United States Steel Corporation of Delaware; was announced recently by David F. Austin, vice president—sales.

Mr. Schmidt comes to the Delaware Corporation from American Steel and Wire Company, United States Steel subsidiary, Cleveland, where he has been manager of the advertising division.

A graduate of Ohio State University, Mr. Schmidt served with several newspapers, the United Press and Steel Magazine before joining American Steel and Wire in 1938 as advertising production supervisor. He was made assistant advertising manager for the Company in 1943 and manager in 1945.

Mr.Schmidt has been an active member of several advertising associations. He is a director of the National Industrial Advertisers Association, a member of the Cleveland Advertising Club and vice president of the Industrial Marketers of Cleveland.

Harry P. Stolz, Stanley & Stolz, Los Angeles consulting engineers and geologists, is in Washington, D.C., to testify before a House special committee studying immediate and long range petroleum problems of the armed services.

Stolz, as a captain in the Naval Reserves, was during the war in charge of Naval Petroleum Reserve No. 1 at Elk Hills. His work won special recognition and commendation of the Secretary of the Navy.

Joe Jensen, Los Angeles oil leader and chief petroleum engineer for Tide Water Associated Oil Co., who was on the ailing list for some weeks, has recovered his health and is back on the job developing oil.

R. L. Minckler, president of General Petroleum, spoke on "The Outlook for Oil Supply" at the dinner meeting of the Petroleum Accountants' Society at the Los Angeles Biltmore Hotel.

Visual Boards Aids Operations

By
S. K. HARGIS

The many factors which enter into any extensive new oil well development project must be properly coordinated and always under the observation and control of management, if an efficient and economical operation is to be assured. Many companies have found that ordinary routine paper records fail to present the "picture" of new well development on a day to day or even hour by hour basis without considerable cost in time or money—not only of executives but of clerical help.

To improve operations in new wells in this direction Standard of California has adopted the visual board system of factor control. This system was devised and developed during the last war to speed up war production and to provide information—at a glance—will enable management to forecast possible bottlenecks and take necessary steps to prevent them. (For reading on this topic, see "Visual Controls In Business," Wassell, publisher, Westport, Conn.).

The visual system is extremely flexible, it is pointed out, and will enable a daily record of as many as a hundred factors or more on the same board. It is also being used in the oil industry for other controls such as production, inventories, purchasing, etc.

However, it is said that the system described here, kept posted from routine paper records, is mainly valuable in that it saves costly errors which may result from even minor factors which stop and retard progress.

The visual control board used in this case is simple, and can usually be operated by an intelligent routine office worker. The flexibility of the method will be easily realized from the following description:

A visible index is located at the left side of the board. It is used to hold the permanent card records of the items or elements under control. There are 100 card pockets on each panel. A legend is located at the top of the board, and is used to show the meaning of the pegs and of cords.

A peg hole section is placed on the main body of the board—for the purpose of visibility analyzing information on the cards by means of the pegs and cords. A heading strip is attached across the top of the peg hole section—to reveal quantity and/or time represented by peg holes from left to right. There is one tape peg for each item in the visible record panel, and each is numbered to correspond with the card pocket (at left). Each peg is attached to a cord which pulls outward from the board so that it may be extended from left to right on the board as needed.

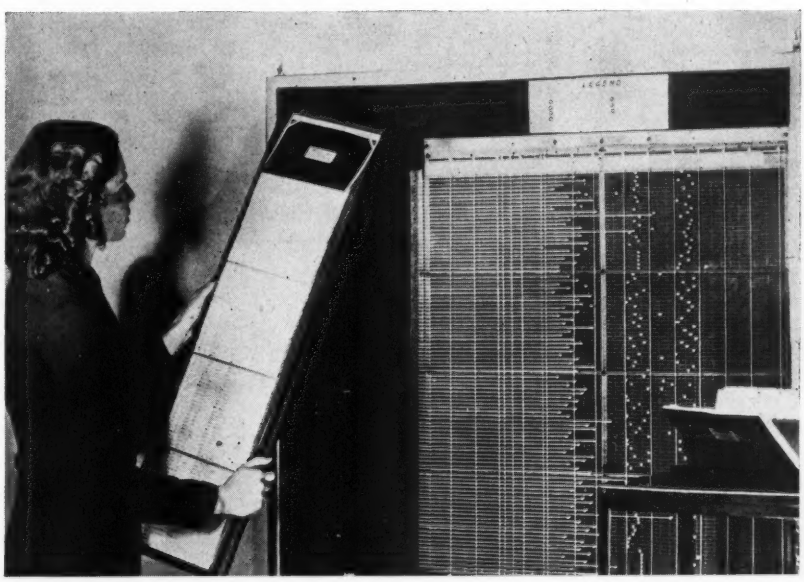
The signal pegs are located, according to procedure, in the various peg holes, their meaning being noted on the legend at the top of the board. The "today line" is attached vertically to the board and is moved periodically from left to right in accordance with the time element in the procedure.

Thus, in making it possible to exert control in such an operation, a visual method such as this offers certain very definite advantages. It provides, at a glance, a knowledge of all pertinent facts and figures, eliminates from the executives' attention situations which are in a normal condition, spotlighting the bad points and thereby reducing, immeasurably, the amount of time necessary to make an analyzed report.

It flashes the facts to all interested parties at one time, is flexible and can be adapted quickly to any problem. It eliminates, according to the users, or greatly reduces the amount of time necessary for the accummulation of usable facts from a routine, paper record.

In fact, it is a well known maxim that "in any kind of business operation, the greatest obstacles to efficiency are bottle-necks that appear from nowhere, and always develop at the wrong time." However, it is also true that bottlenecks do not just casually happen;—they are the slow, constant, growth of weak production or operating control which reflects the need for improvements. Students of postwar business controls generally agree that, in view of these facts, the remedy at hand is to have a stronger link of production or operation function with the central control that gives an up-to-the minute picture of your business—graphic presentation of past, present and future operations, singly, combined, and in proper sequence one to the other.

As users of such systems have pointed out:



When production (or if the case may be, operation) is under accurate central control, there's far less waste of time and money—because men, resources and/or necessaries are used to their fullest capacity, and to save valuable man-hours, conserve vital executive time are among the results of efficient production.

Perhaps before the war, while these needfuls and their objectives were appreciated and even sought in industry, business and transportation through various methods, the postwar world is becoming constantly more visual-minded with the result that methods of operation in all kinds of enterprises today are converging to the point of the graphic as in the instance described in this article.

Raleigh B. McKeon, 56, widely known member of the oil fraternity, died in Long Beach, where he had lived for 27 years. He was born in Sioux Falls, S. D.

Pumper and Mrs. H. M. Brinhall of the Sunray Oil lease at Santa Maria have announced the wedding of their daughter Betty to Daniel M. Smith of Arroyo Grande.

Rush M. Blodget of the Oil Producers Agency is in Washington, D. C., for committee meetings called for consideration of the nation's civil and military oil picture.

Seaside Oil Co., second oldest oil company in the West, commemorated on February 24 the 50th anniversary of its founding. Harry A. Jackson, president, said "we are proud of our golden anniversary and proud, too, of Seaside's contribution to the romantic development of the great western area."

Conejo Try Digs

Ti-Bell Drilling and Roy, Inc., is prospecting on down near 6700 ft. with Janss No. 1 on the Janss Ranch in the Conejo area on Sec. 33-2n-19w, Ventura County.

March Meeting So. Calif. Meter Association

Mr. Frank G. Philo, Chief Mechanical Engineer of the Southern California Edison Company, Los Angeles, will be the principal speaker on the March program of the Southern Cailfornia Meter Association. Mr. Philo was in charge of the rebuilding of the Edison Company's Long Beach Steam Station and served for many years as Superintendent of Steam Generation.

At the present time he is supervising power equipment design and installation at the new Redondo Steam Station, and the subject of his talk will be "Automatic Control" and its application in this new power station.

The S.C.M.A. meeting will be held at the Rio Hondo Country Club on March 18. Dinner will be served at 6:00 P.M. and the program will begin at 8:00 P.M.

A second speaker, Mr. Harold Nickle of the Precision Instrument Company, Long Beach, will present his subject "Special Instruments and Their Applications."

Talbert Try Running Log

Electric log is being run in Shell Oil Co.'s Lamb Comm. No. 51-6 in Sec. 6-6s-10w in the Talbert area of Orange County. Present depth of the project is 7835 ft.

Kraemer Well On Schedule

R. L. Wheelock, J. L. Collins, J. S. Abercrombie and J. L. Porter, a combination of Texas operators, are preparing to drill Travis No. 1 on a 150-acre lease in Sec. 24-3s-9w in the Kraemer area.

West Newport Try Reaming

Amerada Petroleum Corp, is reaming to run casing to set at a point above bottom at 5540 feet in its Farnsworth No. B-38-7 test in Sec. 7-6s-10w at West Newport.

West Coyote Well Starting

Standard of California has staked location for Murphy-Coyote No. 212 in Sec. 19-3s-10w in the West Coyote field, Orange County.

C.N.G.A. Sets Date For Frolic And Fall Meeting

At a recent meeting of the Executive Committee of the California Natural Gasoline Association, dates for that organization's annual June Frolic and its 23rd annual Fall Meeting were established according to the announcement of F. J. Colton, C.N.G.A. president.

Saturday, June 5th, has been selected as the day and the Rio Hondo Gulf Club, Downey, California, has again been chosen as the locale for the fun fest which features an all day sports program, dinner and evening show.

C.N.G.A.'s annual Fall Meeting will be held Friday, October 8th, at the Ambassador Hotel, Los Angeles. Details of the program are being developed to feature outstanding papers at the all day technical session.

Arch Rater Moves To Oil Base, Inc.

Oil Base, Inc., Compton, California, makers of Black Magic oil base drilling fluid, announces the appointment of Arch Rater, Jr., as Service Engineer. Rater will be stationed temporarily in California but later plans to work out of the Oklahoma City office as permanent representative for Oil Base, Inc., in the mid-continent.

Rater was formerly with Halliburton Oil Well Cementing Co., and with Baroid Sales Division. He served with the Air Corps during the war.

OILFOLKS have invented many things. Automatic tank cutoff on the pipeline when the water came in . . . sound motion pictures . . . alcohol from gasoline . . . oil gauge at the well for pipeline shipments . . . and about 124 other things. Most of these inventions came from practical hard working men in the field on the job the greater and best part of the years of their lives. FARMERS IN KERN ARE NOW LOOKING FORWARD TO HAVING THE OIL INDUSTRY'S INVENTIVE MINDS MAKE RAIN.

PROGRESS IS THE AMERICAN WAY OF LIFE. THE PETROLEUM INDUSTRY IS PROGRESSIVE.